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# THESIS

MARINE CORPS INTELLIGENCE AND ALL-SOURCE  
FUSED ANALYSIS SUPPORT TO MARINE  
AND JOINT OPERATING FORCES:  
COMPLEXITIES, PROBLEMS, AND CHALLENGES  
FOR THE FUTURE

BY

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**Marine Corps Intelligence and All-Source  
Fused Analysis Support to Marine and Joint  
Operating Forces: Complexities, Problems,  
and Challenges for the Future**

by

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Major United States Marine Corps

B.A. Political Science, University of Idaho 1979

Submitted in partial fulfillment of the  
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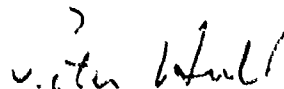
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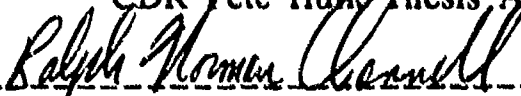


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## ABSTRACT

This thesis examined the status of all-source fused intelligence support within the United States Marine Corps. Deficiencies in this area were identified in the late 1980s and the Marine Corps created two new organizations dedicated to the production of all-source fusion intelligence: the service level Marine Corps Intelligence Activity and three MAGTF All-Source Fusion Centers. Despite the creation of these organizations, a number of factors continue to complicate and inhibit Marine Corps Intelligence from providing more than rudimentary all-source, fused, tailored intelligence support to Marine Corps and joint operating forces. A survey questionnaire returned by nearly half of all Marine Corps intelligence officers, and research into these new all-source fusion organizations, determined that continued manning and structure deficiencies, inadequate training and education, and problems with experience level and assignments are the main problems. The Marine Corps is taking active steps to correct these deficiencies, but with downsizing and budget cutbacks, all-source, fused intelligence support by Marines to Marines, may remain more a goal than a reality.

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## EXECUTIVE SUMMARY

In Vietnam, Beirut, Desert Storm, and many other operational commitments, Marine Corps intelligence learned the value of all-source fusion analysis. Despite those lessons, all-source, fused, tailored intelligence, particularly at the operational/tactical level, remains a Marine Corps objective, but not a reality.

Three primary areas significantly impede Marine Corps capabilities to produce all-source, fused, tailored intelligence: structure, organization, and manning combined; training and education; and experience level and assignments.

The Marine Corps decision in the late 1980s, to create organizations and structure to focus all-source fusion intelligence analysis at two levels has paid partial dividends. Commandant Alfred M. Gray's vision for a service level all-source fusion center has largely been realized with the establishment and continued growth of the Marine Corps Intelligence Activity. This organization, thanks to resource investment and civilian analyst billets--a reflection of the Marine Corps' priorities--has developed a capability to accomplish its mission and tasks. Unfortunately, the MCIA is not in a position, physically or within an operational chain



of command, to provide direct all-source fused, tailored intelligence to deployed Marine forces.

This leaves the MEF level MAGTF All-Source Fusion Centers (MAFCs), specifically created to serve this operational intelligence function, as the organizations of choice to accomplish all-source fusion intelligence analysis support for Marine operating forces. Unfortunately, the Marine Corps has not made the proper investment in these organizations in terms of manning--both in numbers and in quality and experience level of the personnel assigned. This has been, and continues to be, the most significant reason why all-source fused, tailored, intelligence has not been produced by Marines for Marines in the quantity and quality desired or expected.

With or without additional manning and structure, the Marine Corps must do a better job of training and educating intelligence personnel in the art of intelligence analysis and all-source fusion. All-source fusion intelligence analysis must become the focus of all intelligence training. However, all-source fusion training must be continuous and realistic, both in garrison and in exercises.

Despite short term Marine Corps initiatives to alleviate intelligence officer personnel shortages, continued shortages of experienced intelligence personnel assigned to the FMF will continue to dictate an almost exclusive focus on processing

combat information versus production of finished intelligence reflecting well reasoned, all-source, fused analysis.

There are also not enough experienced intelligence personnel working in analysis billets. An effort must be made to identify key analyst billets within the Marine Corps, starting with the MAFCs. Then, better efforts must be made to fill these billets with personnel specifically experienced in all-source fusion analysis, as well as with other intelligence personnel with pertinent area expertise/familiarity.

Unfortunately, the problems identified in this thesis are for the most part symptomatic of the many larger problems facing Marine Corps intelligence in general. The Marine Corps is aware of the many deficiencies within the intelligence field and is aggressively tackling the problems head on.

The Marine Corps has always prided itself on doing more with less. This does not work when it comes to all-source fusion analysis support to Marine and joint operating forces. The Marine Corps must make a much greater investment in people--in terms of numbers, training, and assignments--if all-source fused, tailored, intelligence support by Marines for Marines and joint operating forces is to be improved. Without that investment, Marine Corps intelligence organizations and personnel will continue to operate as they have, and all-source, fused, tailored intelligence will remain more a goal than a reality.

## I. INTRODUCTION

Although the nature of uncertainty has changed, and perhaps moving to a higher and more complicated plateau, it nevertheless remains the very essence of war as in the past.

...not all of the information received is correct nor can it always be decoded, analyzed or interpreted in time. The ever-present possibility of deception also casts doubt upon all the data received, since no dependable method of exposing deception has been, or can be, devised. The staggering increase in the volume of information obtained means that if anything, more, not less, time is needed for processing today; it means that this plethora of information may lead to a higher incidence of contradictory data and at times to the paralysis of command.

Michael I. Handel<sup>1</sup>

### A. GENERAL BACKGROUND/BEIRUT BOMBING

At the end of the Vietnam War twenty years ago, the most common self-analysis by members of the intelligence community (Marine Corps) following tours in Vietnam condemned members of the community for failing to have recognized the immediacies of the situation relative to the collection and analysis (my emphasis) of timely intelligence information.<sup>2</sup> Consequently, in the ensuing years, a number of initiatives were undertaken

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<sup>1</sup>Michael I. Handel, Intelligence and Military Operations, (London: Frank Cass & Company, Limited, 1990), 5.

<sup>2</sup>R.B. MacKenzie, Captain, USMC, "Intelligence Starts at the Top," Marine Corps Gazette, 57 (July 1973): 40.

within the Marine Corps in an attempt to correct institutional deficiencies in intelligence.

One of the most significant initiatives intended to correct Vietnam era intelligence problems, was the opening up of the intelligence military occupational specialty (MOS 0202) to unrestricted line officers as a primary MOS. Until the late 1970s, Marine Corps intelligence was accomplished by Limited Duty Officers (LDOs) and by other unrestricted officers carrying intelligence as a secondary MOS. The opening up of the field to unrestricted officers, succeeded in conveying a new sense of legitimacy to the field, and most certainly elevated the amount of visibility and attention the occupational field received within the Marine Corps.

In the early 1980s, the age old debate, last visited in the wake of Vietnam, on how best to provide intelligence support to forward deployed Marines heated up again. At that time, two primary organizations were responsible for producing "tailored," "fused" intelligence products in support of Marine Corps units. Manned by both Marine officer and enlisted intelligence personnel, they were Fleet Intelligence Center Pacific (FICPAC) and Fleet Intelligence Center Europe and Atlantic (FICEURLANT). As a result of the debate, the Marine Corps took steps to improve "tailored," "fused" intelligence support to Marines deployed to the Mediterranean. These included consideration of the establishment of a Power

Projection (P2) Cell at Fleet Ocean Surveillance and Information Facility (FOSIF) Rota, Spain. As a part of this initiative, several Marine Corps intelligence billets (officer and enlisted) were created at FOSIF Rota to enhance intelligence support to Marine units deployed to the Mediterranean. These, and other organizations responsible for providing intelligence to U.S. forward deployed forces in the Mediterranean, came under scrutiny following the tragic 23 October 1983 terrorist bombing attack of the 24th Marine Amphibious Unit (MAU) Battalion Landing Team (BLT) Headquarters in Beirut, Lebanon. The bombing took the lives of 241 U.S. military personnel and in so doing, forced the Marine Corps to take a hard look at all aspects of intelligence support. This included the types and amount of raw information and intelligence related to the incident, and the degree to which all-source fusion of that information and intelligence did or did not occur in support of the MAU and the BLT.

The Long Commission report on this bombing included a finding of "inadequate intelligence"--specifically, that the Marine commander in Beirut "was not provided with timely intelligence, tailored to his specific operational needs."

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<sup>3</sup>U.S. Department of Defense. Report of the U.S. DOD Commission on Beirut International Airport Terrorist Act, October 23, 1983 ([Washington, D.C.]: U.S. Department of Defense, 20 December 1983), 66.

And, while another finding was that support to conventional, tactical military requirements received praise from many in the administrative and operational chains of command, one specific finding had a particular impact on all-source fusion analysis support within the U.S. Marine Corps. That finding, more specifically a recommendation, was that significant attention must be given by the entire U.S. intelligence structure to purging and refining masses of generalized information into intelligence analysis useful to small unit ground commanders.<sup>4</sup> The report stated emphatically that, "there was no institutionalized process for the fusion of intelligence disciplines into an all-source fusion support mechanism."<sup>5</sup> In the aftermath of this post mortem, a serious reexamination of how best to support deployed U.S. forces with all-source fused intelligence analysis support occurred at all levels within the intelligence community.

#### **B. C4I2 CONCEPT AND START OF AN ALL-SOURCE FUSION CAPABILITY**

Within the Marine Corps, this examination took a number of years, and the arrival of General Alfred M. Gray as Commandant in 1988, before institutional changes required to develop a true all-source fusion intelligence capability were made. Early in 1988, a group of Marine officers was assigned by

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<sup>4</sup>Ibid., 65.

<sup>5</sup>Ibid.

General Gray to study the structure of the operating forces and recommend changes that would enhance the warfighting potential of the various Marine Air Ground Task Forces (MAGTFs). This initiative aggressively restructured and refocused the Marine Corps to face the challenges of the 1990s --away from East-West confrontation and toward emerging threats in the Third World. In the Winter 1989-1990 American Intelligence Journal, General Gray outlined several decisions based on proposals from this study group and which affected Marine Corps intelligence. He said, "we are doing what we can to improve tailored intelligence for Marine Corps' needs at both the strategic and tactical levels." General Gray listed three major initiatives directly affecting intelligence:

- \* At Headquarters Marine Corps, he combined the Intelligence Division with the C4 Division to form the Command, Control, Communications, Computer, Intelligence and Interoperability (C4I2) Department under a Major General, Assistant Chief of Staff.

- \* At Quantico, Virginia, he created a service-level intelligence center within the Marine Corps Combat Development Command (MCCDC).

- \* In the Fleet Marine Forces (FMF) he formed Surveillance, Reconnaissance, and Intelligence Groups (SRIGs).'

On 9 September 1988, Brigadier General J. D. Beans, Director of Marine Corps C4I2 made an office call on General

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'Alfred M. Gray, Commandant of the Marine Corps, "Global Intelligence Challenges for the 1990's," American Intelligence Journal, 11 (Winter 1989 - 1990): 3.

'Ibid.

Gray during which General Gray passed down his comments and provided general guidance on C4I2 and the SRI Group. In a 13 September 1988 memorandum to the Assistant Commandant outlining the key points of his office call with the Commandant, General Beans said, when discussing the creation of a service level intelligence center, the guidance from the Commandant was clear: "Quantico should be the model of all-source fused and tailored intelligence."<sup>8</sup> At the operational and tactical levels, General Gray's initiative to enhance intelligence capabilities was already in motion.

The Commandant had directed the establishment of an SRI Group in each of the three Marine Corps Marine Expeditionary Forces (MEFs). The SRI Groups consolidated all of the intelligence collection, production, and dissemination capabilities into one organization. Prior to the formation of the SRI Groups, the collection and production assets of each MEF were scattered among the major subordinate commands which complicated the coordinated employment of the various assets. The Commandant's Force Structure Study Group also recommended that an intelligence company be created under the SRI Group to consolidate these eight intelligence units of the MEF. In

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<sup>8</sup>J.D. Beans, Brigadier General, USMC, Director, Command and Control, Communications, Computer, Intelligence and Interoperability (C4I2) Department, Headquarters U.S. Marine Corps memorandum to Assistant Commandant of the Marine Corps, 5000 over C4I2 4/997 dated 13 Sep 88, TMsS [photocopy], p. 2.



addition to the eight existing intelligence-related units within the MEF, two new units were to be created--a tactical deception platoon and an *all-source analysis center* (ASAC) (my emphasis), later renamed Marine Air Ground Task Force (MAGTF) all-source fusion center (MAFC).<sup>9</sup>

The ASAC was intended as a direct answer to earlier criticism from various sources, including Congress, that at the Fleet Marine Force (FMF) level the Marine Corps did not possess the ability to process intelligence derived from all available sources and provide a product to a supported commander. As mentioned earlier, the Commandant and the Force Structure Study Group had identified fused all-source intelligence support to MAGTF commanders as a critical part of preparing the Marine Corps for operations in the 1990s. With their unique power projection capabilities, MAGTFs possessed equally unique intelligence requirements that may or may not have been adequately addressed by a theater commander's intelligence architecture.<sup>10</sup> So the challenge was to create a dedicated FMF organization to provide all-source fusion.

At the MEF level, the ASAC and its derivative detachments in support of smaller MAGTFs were intended to provide to the

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<sup>9</sup>Brendan P. Ryan, Major, U.S. Marine Corps, "MAGTF All-Source Fusion Center," Marine Corps Gazette 74 (August 1990): 60, 61.

<sup>10</sup>Ibid., 61.

commander an organic capability to fuse intelligence received from all available sources. The ASAC would focus on the difficult process of making sense out of disparate reports, screen out the irrelevant and distractors, and provide a streamlined intelligence product that focused on the immediate needs of the supported commander."<sup>11</sup> (The official mission, function, and organization of these all-source fusion centers is discussed in Chapter III.)

On 1 February 1988, the Marine Corps Intelligence Center, the service level organization, was officially activated with initial operational capability (IOC) achieved in January 1992.<sup>12</sup> The MAFCs followed soon after. On 28 September 1988, the Commandant of the Marine Corps activated the 2d Surveillance, Reconnaissance, and Intelligence Group under II Marine Expeditionary Force (MEF) at Camp Lejeune, North Carolina effective 1 October 1988.<sup>13</sup> Eight months later, the 2d MAGTF All-Source Fusion Center (MAFC) was activated at the same location under 2d Intelligence Company of the 2d SRI Group. On 1 June 1989, it became the first all-source fusion

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<sup>11</sup>Ibid. "Smaller MAGTFs" referred to Marine Expeditionary Brigades (MEBs) and Marine Expeditionary Units (MEUs).

<sup>12</sup>Rick Raftery, Major, U.S. Marine Corps, Operations Officer, interview by author, 24 March 1993, Handwritten notes, Marine Corps Intelligence Activity, Quantico, Virginia.

<sup>13</sup>Commandant of the Marine Corps, Marine Corps Bulletin 5450 Activation of 2d Surveillance, Reconnaissance and Intelligence Group (SRI Group), 282020Z Sep 88.

center in the Marine Corps, albeit still in its formative stage. The 2d SRIG was followed by the 1st SRIG with its MAFC under I MEF at Camp Pendleton, California in October 1989, and finally by the 3rd SRIG with its MAFC under III MEF in Okinawa, Japan in October 1990.

Any new organization takes time to develop a full operational capability, particularly those created from scratch as were the MAFCs. Unfortunately for the fledgling MAFCs, a major challenge to their concept and vision lay just around the corner.

The first major test of the Marine Corps' newly developing all-source fusion analysis capability was Operation Desert Shield/Storm from August 1990 to February 1991. Although not fully manned, the 1st MAFC deployed in August in support of I MEF and was augmented by the 2d MAFC in early January 1990. Together, with some additional augmentation, the two MAFCs formed the Analysis and Production Section of I MEF for Operation Desert Storm. The tactical intelligence produced by this section received noteworthy praise at the national level.<sup>14</sup> This assessment was not shared by Brigadier General

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<sup>14</sup>Charles E. Allen, National Intelligence Officer for Warning, National Intelligence Council, Director of Central Intelligence, memorandum to General Alfred M. Gray, Commandant of the Marine Corps, NIC 00272/91 dated 19 March 1991, TMS [photocopy] with forwarding cover letter from John F. McCreary, Director, National Warning Staff to LtCol B.E. Brunn USMC 3 July 1991 NWS/U-0030-91 TMS [photocopy].

Paul K. Van Riper, who traveled throughout Southwest Asia from early January to early March 1991. Observing all aspects of deployed Marine forces in the theater, he noted in the June 1991 Marine Corps Gazette:

The weakest area I observed was tactical intelligence. Shortcomings existed at all levels, though the most significant were at the higher echelons...When it comes to analysis of information to produce useable intelligence, we are particularly weak.<sup>15</sup>

While there has been much internal debate within the Marine Corps intelligence community over the nature of General Van Riper's observations and conclusions relative to Marine Corps intelligence in the Gulf, and whether the failing relative to analysis was measurable or simply a matter of perception, it remains a fairly widespread belief within the Marine Corps intelligence community that there were and are serious deficiencies in our ability to conduct all-source fused intelligence analysis of the type demanded by the situations in Vietnam, Beirut, Desert Storm and all other contingency commitments in between and since.

### C. THESIS PURPOSE, SCOPE, AND ORGANIZATION

This thesis identifies many of the complexities and problems which inhibit Marine Corps intelligence from

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<sup>15</sup>Paul K. Van Riper, Brigadier General, USMC, "Observations During Operation Desert Storm," Marine Corps Gazette 75 (June 1991): 58.

providing all-source fused intelligence analysis support to Marine Corps, and potentially to joint operating forces. Despite the creation and continued organizational existence of three MAGTF all-source fusion centers within the Fleet Marine Force, as well as the Marine Corps Intelligence Center (now redesignated the Marine Corps Intelligence Activity) at the service level, all-source fusion intelligence analysis support provided by Marines for Marines remains more a goal than a reality.

This thesis looks at the ongoing organizational initiatives within the DOD intelligence community as they affect all-source analysis support to Marine forces, but more specifically at the many other factors which continue to complicate and inhibit significant progress in developing a true, all-source fusion analysis capability within Marine Corps intelligence at the operational and tactical levels. Chapter II provides some background on the nature of intelligence analysis in general, including definitions of terms used throughout the rest of the thesis related to intelligence analysis and all-source fusion. A discussion and general framework is necessary to better understand the impact of the major factors affecting all-source fusion intelligence analysis covered in subsequent chapters.

These factors, covered in Chapters III through V respectively, are Structure, Organization and Manning; Training and Education; and Experience Level and Assignments.

The 2d MAFC, as the first activated and longest operating MAFC serves throughout to provide case study examples.<sup>16</sup> Discussions of national, theater and service level all-source fusion organizations, initiatives, and procedures are restricted in scope to how they are perceived to be affecting support to Marine forces.

Throughout each chapter appear the results of selected questions related to the chapter topic from a questionnaire survey sent to all 340 Marine 0202 and 0205 intelligence officers between the rank of Warrant Officer and Lieutenant Colonel on active duty in April 1993. The questionnaire, administration details, and summarized results are attached at the Appendix. 147 of 310 officers believed to have received the survey responded for an overall 47 percent response rate.

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<sup>16</sup>The author was the Officer-in-Charge of the 2d MAFC from August 1990 until June 1992 and deployed with the unit to Operation Desert Shield/Storm. Discussions with other OICs and personnel of the other two MAFCs during the same time period and since reinforces most if not all of the author's experiences with the 2d MAFC, substantiating use of the 2d MAFC experiences as illustrative examples throughout. The author had access to the entire 2d MAFC historical file during the production of this thesis. When citing a specific example for which there is no ready documentary evidence, the author will cite the example from the memory of his experience. If unsure whether the example applies to the other MAFCs, the author will so state.

Chapter VI is a summary of conclusions and implications for the future of all-source fusion intelligence analysis in the Marine Corps. While beyond the scope of this thesis, some general recommendations for policy change considerations are suggested.

#### **D. RELEVANCE**

Intelligence restructuring, underway at all levels within the Department of Defense, is intended to streamline intelligence support and avoid duplication of effort. Nowhere is this more important than in the production of all-source fused analysis support to deployed U.S. forces. More often than not, these deployed forces will include U.S. Marines.

Since World War II, there have been over 200 situations requiring the use of U.S. forces; roughly 85 percent of which required the employment of Marines, and virtually all were in the Third World.<sup>17</sup> As the past two years have demonstrated, there is every indication that this level of commitment will continue, if not increase in the foreseeable future. The Marine Corps is the nation's smallest service yet must maintain a global focus. Of 191 sovereign countries identified a year ago in the Marine Corps' Mid-Range Threat Assessment, 115 countries remain of potential interest to the

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<sup>17</sup>Gray, 4.

Marine Corps.<sup>18</sup> All traditional Marine Corps power projection and forward presence missions as well as the recent focus on peacekeeping, peacemaking, humanitarian assistance, and counternarcotics only further strain our limited intelligence resources.

The Marine Corps has traditionally done extremely well at the tactical level of operation. Because of this, the Marine Corps has tended to focus on the tactical aspects of war to the neglect of operational aspects.<sup>19</sup> As demonstrated by the scope of operations in the Persian Gulf, and as the Marine Corps embarks into the arena of joint operations, not only as a component, but as the Joint Task Force Command Element nucleus as it was for Operation Restore Hope in Somalia, the scope of Marine Corps doctrinal thinking and actual involvement is broadening to the operational level. As stated in current Marine Corps doctrine:

Operational intelligence must reflect the broader perspective of operations. As the operational level of war is less a matter of actual fighting and more a matter

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<sup>18</sup>Headquarters, U.S. Marine Corps, Mid-Range Threat 1992-2002, Part II, (Washington, D.C.: Headquarters, U.S. Marine Corps, Director of Intelligence, 1992), 2-1. Countries of potential interest met a criteria for "expeditionary" status--that a country must have either a seacoast (of any length), or be within the range of assault support aviation operating from a naval platform.

<sup>19</sup>Headquarters, U.S. Marine Corps, Fleet Marine Force Manual 1-1, Campaigning (Washington, D.C.: Headquarters, U.S. Marine Corps, 1990), 87.



of schemes and intentions, operational intelligence focuses less on current combat capabilities and more on forecasting future enemy capabilities, intentions, and options. Because the operational level of war has as its aim the attainment of a strategic objective, operational intelligence must provide insight into the strategic situation and all factors, military and otherwise, that influence it.<sup>20</sup>

The U.S. Armed Forces and the national intelligence community have invested enormous resources in harnessing the capability of modern technology to provide intelligence to the operator. The challenge for joint force commanders normally is not to amass more data but to extract and organize the knowledge most useful for overcoming the enemy.<sup>21</sup> Clearly, the requirement for an all-source fusion intelligence analysis capability exists. The question is, does the Marine Corps have that capability? Again, this thesis examines this very question.

The Marine Corps will continue to find itself at the Low Intensity Conflict (LIC) end of the spectrum of conflict. The unique nature of intelligence requirements in a LIC environment have been well documented. They include a necessary focus at a lower, grass-roots level. Enemy order of

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<sup>20</sup>Ibid., 75.

<sup>21</sup>Chairman of the Joint Chiefs of Staff, Joint Publication 1, Joint Warfare of the US Armed Forces, (Washington, D.C.: Chairman of the Joint Chiefs of Staff, 1991), 34.

battle and data bases must also be generated to a lower level.<sup>22</sup> Beirut is the most obvious example, but certainly U.S. Marine involvement in Operations Just Cause in Panama and Restore Hope in Somalia reinforced this understanding. The Commander of the 22nd Marine Expeditionary Unit (MEU) included in his lessons learned from the Marine noncombatant evacuation (NEO) of American citizens and protection of the U.S. Embassy in Monrovia, Liberia during Operation Sharp Edge from June to August 1991, the following:

In combination, the flood of message traffic from various intelligence organizations, and the paucity of specific information responsive to the commander's requirements, suggested the need for a single focal point capable of providing collection management and all-source analysis services to the commander and his staff. Neither Embassy resources nor organic resources (including Navy resources afloat) were adequate to the task of managing multidisciplinary collection by external agencies, and fusing the flood of raw data into timely useful reports.<sup>23</sup>

Intelligence support in a LIC environment cannot be effective without all-source fusion analysis.

Finally, across all spectrums of warfare and other military involvement, as stated by the Commander of 22nd

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<sup>22</sup>James D. Bears, Brigadier General, USMC, "Marine Corps Intelligence in Low Intensity Conflicts," Signal, 14 (March 1989): 29.

<sup>23</sup>Robert David Steele, USMC Management Analyst, Intelligence Lessons Learned From Recent Expeditionary Operations, (Special Report for C4I2 Department, Headquarters, U.S. Marine Corps, 3 August 1992): 9.

MEU, information overload can quickly become a problem. Current intelligence collection systems can produce five or ten times as much data in the same amount of time as their counterparts of just ten years ago (Beirut), which in turn produced information five to ten times as quickly as their predecessors ten years before that (end of Vietnam). This raw information can be invaluable, but only if the intelligence community can transform it into useful intelligence.<sup>24</sup> All the raw information in the world, together with an ability to disseminate large amounts of data/information down to the lowest tactical level is an effort in futility if at some point, the information is not effectively, accurately, and in a timely manner, filtered and synthesized into "intelligence."

As the Marine Corps downsizes and reorganizes to meet fiscal constraints, while at the same time facing an ever complex and unstable world situation, Marine Corps intelligence responsibilities are growing, while capabilities to filter, tailor, and fuse all-source information and/or intelligence in support of Marine and Joint operating forces are seriously hampered by many

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<sup>24</sup>Bruce D. Berkowitz and Allan E. Goodman, Strategic Intelligence for American National Security (Princeton, New Jersey: Princeton University Press, 1989), 16.

factors. First, however, a basic examination of the complex task of intelligence analysis and some related definitions provide the necessary framework for a broader understanding of the impact these factors have in inhibiting all-source fusion efforts in the Marine Corps.

## II. INTELLIGENCE ANALYSIS AND ALL-SOURCE FUSION

It is the intelligence officer's job to determine what the enemy is doing, not merely to disseminate the many scraps of information, and require the recipient to draw the conclusions.

LtCols Robert R. Glass and Phillip B. Davidson<sup>5</sup>

However much information is available, we do not have all that might be possible to obtain; i.e., the information is incomplete, often on matters of considerable importance in the problem at hand. Usually, the items of information, taken alone or in the aggregate, will be inconclusive in the sense that the information does not perfectly favor or make necessary any particular conclusion. Finally, the information is provided by sources having any gradation of credibility and will usually be unreliable to some degree and for various reasons. Some of these reasons involve the sources themselves, others involve the manner in which we subsequently process or interpret what the sources report to us. You would be hard-pressed to identify a more difficult intellectual task than that of combining a mass of incomplete, inconclusive, and unreliable information in order to arrive at a defensible conclusion.

David A. Schum<sup>6</sup>

### A. INTRODUCTION

Too often people throw around the terms analysis and all-source fusion as if they are something which can be easily

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<sup>5</sup>Robert R. Glass and Phillip B. Davidson, Intelligence is for Commanders, (Harrisburg, Pennsylvania: Military Service Publishing Company, 1948), 39. Chapter 8 of this book is entirely about the evaluation of information and provides an excellent primer on that topic for any military intelligence analyst.

<sup>6</sup>David A. Schum, Evidence And Inference For The Intelligence Analyst (Lanham, Maryland: University Press of America, 1987), 2.

accomplished or even measured. In reality they are both complex processes which in and of themselves are part of larger more complex processes, all of which are part of the overall intelligence process. Although both can be accomplished at times with little or no apparent effort, analysis and all-source fusion reflect complex thinking and reasoning skills. The most common forms of reasoning used in inferential intelligence analysis, often accomplished by analysts without any formal training or conscious awareness of the forms being used, are deductive, inductive, and abductive reasoning.<sup>27</sup> As alluded to earlier, our technologies to collect information have far outstripped our technologies for the inferential use of information. Hence, other than some automation to assist in the processing and recording of information, the actual reasoning skills necessary to analyze, and all-source fuse, information remains a human brain function.

It has been said that unless analysts lay out their chain of reasoning and the nature of evidence supporting their conclusions, policymakers have little reason to prefer intelligence assessments to reliable newspaper reports, cables

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<sup>27</sup>For a detailed discussion of these three forms of reasoning, see Schum, Chapter 2 "Ingredients and Reasoning Patterns of Inferential Intelligence Analysis."

from overseas representatives, or their own hunches.<sup>23</sup> Military commanders have every reason to expect their intelligence analysts to lay out chains of reasoning, yet the skills to do so are not easily learned. Some say that you can either think and reason this way naturally, or you cannot. Too often, due to any number of factors, analysts become much more involved in processing information, rather than analyzing and fusing information. To fully appreciate the nature of the challenge for intelligence analysts, this chapter provides a review of the intelligence analysis process and all-source fusion, as well as some definitions of terms for a common frame of reference throughout the rest of this thesis.

## **B. INTELLIGENCE ANALYSIS**

Intelligence analysis is the process by which acquired data is converted into intelligence. Data itself is information, experience, knowledge, news, intelligence, descriptions, and statements. Data may be abstract or tangible, qualitative or quantitative, historical or contemporary. It may range from small bits of observable facts all the way up the ladder of complexity and abstraction to inclusive, unifying generalizations and hypotheses. It may be oral, written, symbolic, pictographic, or behavioral. The

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<sup>23</sup>Roy Godson, ed., Intelligence Requirements for the 1990s (Lexington, Massachusetts: D.C. Heath and Company, 1989), 76.

product resulting from the collection, processing, integration, analysis, evaluation, and interpretation of all available data at any given time is intelligence. This process of intelligence is often depicted as occurring within what is called the *intelligence cycle*.

The intelligence cycle consists of five steps: Direction, Collection, Processing, Production, and Dissemination. Through the use of these five steps, information is collected and processed into intelligence, and then disseminated. While the intelligence cycle is a continuous process, and all phases take place concurrently, the steps within which analysis technically occurs are the Processing and Production Steps. It is important to understand the functions accomplished in these steps to fully appreciate the complexity and demands on the personnel.

At every level, during a crisis, intelligence personnel, most often designated by billet or function as analysts, perform all of the following functions in one manner or another to varying degrees of success. With few exceptions, during routine garrison operations, these same functions are not accomplished on a regular basis either in the course of regular duties nor in training. If the following functional skills and processes are not taught, trained, nor developed in peacetime garrison environments, there can be no reasonable



expectation that they will be accomplished effectively during a crisis or actual combat situation.

### 1. Processing of Information/Data<sup>2</sup>

In the processing step, information is systematically recorded for ease of handling, study and comparison. When necessary, raw information is converted into usable forms, formats, symbols, representations, or incidents in preparation for conversion to intelligence. Collation takes place of like or related bits of information in preparation for production of intelligence.

Recording is the systematic arrangement of all items of information so that they can be observed as an integrated picture and studied in relation to each other. Recording media generally consist of enemy situation maps at various

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<sup>2</sup>Although a purist might seek to differentiate technically between the terms "data" and "information," for the purposes of discussion in this paper, data and information refer to the same thing. The discussion on Processing and Production is a synthesis drawn from four primary sources unless otherwise footnoted: Headquarters, U.S. Marine Corps, Fleet Marine Force Manual 3-20: Commander's Guide to Intelligence (Washington, D.C.: Headquarters, U.S. Marine Corps, 1991), 4-1 through 4-5; Headquarters, U.S. Marine Corps, Fleet Marine Force Manual 3-21: MAGTF Intelligence Operations (Washington, D.C.: Headquarters, U.S. Marine Corps, 1991), 15-1 through 15-9; Headquarters, U.S. Marine Corps, Fleet Marine Force Reference Publication 3-28: Tri-MEF Standing Operating Procedures for Field Intelligence Operations (Washington, D.C.: Headquarters, U.S. Marine Corps, 1992), 6-2 through 6-9; and Headquarters, Department of the Army, Field Manual 34-3: Intelligence Analysis (Washington, D.C.: Headquarters, Department of the Army, 1990), 2-3 through 2-18.

scales, an intelligence journal, a journal file, and intelligence workbooks. The journal and journal file may be automated or manually generated paper documents. Additionally, geographic coordinate registers may be kept as a cross reference to record activity over time at certain locations, and various order of battle files are often maintained to record and document enemy order of battle information.

Typical order of battle information records and files include order of battle situation map overlays, order of battle cards by enemy echelon/unit, personality files, military installation files, enemy organizational charts, and strength and combat effectiveness worksheets (necessary when figuring battle damage assessment figures on enemy units). Although varying in degree and emphasis from one type conflict to another, this type information must be initially acquired and constantly maintained and updated.

Recording and processing are time consuming and manpower intensive. Tables of organization do not specifically identify personnel by billet to accomplish these functions, yet in many cases, particularly at higher levels, these become full time functions/duties which must be accomplished by personnel designated as "analysts." (This topic is discussed in more length in Chapters III and IV.) The more time spent accomplishing the mechanical processes of

recording and collating information, the less time is available for actual analysis. Automation accomplishes some of these tasks at certain levels in the Marine Corps, but a number of factors currently mitigate against fully optimizing this capability. These factors are covered in later chapters.

## 2. Production

Production is the conversion of information into intelligence through the evaluation, integration, analysis, and interpretation of all-source data and the preparation of intelligence products in support of known or anticipated user requirements. Like the steps in the overall intelligence cycle, these four steps in the production phase of intelligence are done continually and concurrently.

As information is acquired, it must always be evaluated to determine its pertinence, reliability, and credibility.<sup>10</sup> This evaluation phase actually takes place twice. It initially occurs as the information first becomes available to the intelligence section when a rapid determination must be made, particularly in combat situations, on whether to disseminate the "raw" information before it has been fully processed, integrated, evaluated, analyzed, and

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<sup>10</sup>For an excellent historical perspective on evaluation at the tactical level (little has changed since WWI) see Walter C. Sweeney, Lieutenant Colonel, U.S. Army, Military Intelligence--A New Weapon In War, Chapter 8, "Evaluation of Information," (New York: Frederick A. Stokes Company, 1924), 162-187.

interpreted. This is done almost instinctively, and is technically unevaluated data called combat information. It is gathered by or provided directly to the tactical commander which, due to its highly perishable nature or the criticality of the situation, cannot be processed into tactical intelligence in time to satisfy the user's tactical intelligence requirements."<sup>1</sup> A second, more systematic evaluation of the same information continues within the intelligence section by the analysts after the information has been initially routed as combat information, and follow-up amplification or clarification of the same information is provided as applicable.

Evaluation of information at lower echelons is a simple step compared to the procedures employed at higher echelons. Any number of factors influence this from the narrower geographical focus to the more focused mission of the unit. At a Marine Air Ground Task Force (MAGTF) level, there is a complete spectrum of intelligence functions which must be performed encompassing support to a ground combat element, an air combat element and a combat service support element. The higher the echelon, the more complex becomes the entire task.

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<sup>1</sup>Joint Chiefs of Staff Publication 1-02, Dictionary of Military and Associated Terms (Washington, D.C.: Office of the Chairman of the Joint Chiefs of Staff, 1992), 74.

Pertinence is the examination of information to determine whether or not the information is pertinent with regard to the enemy or to the battlefield area. Information is also examined to determine who may also need the information and how quickly. This is part of the initial and second evaluation phases mentioned above.

The information is also evaluated in terms of reliability. This is done in relation to both the source of the information and the agency by which it was collected or obtained. The principal basis for judging the reliability of a source or agency, is previous experience with the source. Criteria for evaluating tactical unit reporting include knowledge of their training, experience, and past performance. The headquarters closest to the source or agency is ordinarily the best judge of its reliability. For any echelon to be even reasonably expected to be able to make source reliability judgments in a crisis or combat situation, that echelon must be familiar with the type and format of reporting, as well as the general strengths and weaknesses of a particular reporting agency or source in general, prior to actual commitment to a crisis. Thus, an intelligence unit has to have worked with the data prior to the crisis: it cannot be "turned on" at the last minute.

Together with reliability, a final consideration in the evaluation of information is credibility. Credibility

(sometimes referred to as accuracy), means the probable truth of the information based purely on logic. Its credibility is evaluated based on the consistency of the information within itself and other information, particularly information known to be true; and whether the information is confirmed or corroborated by reports from other sources and agencies. The most reliable method of judging credibility is comparison with other information. Where possible, access to multiple sources of information either through direct collection efforts or simply being allowed access to information that is available at other echelons is often the key to success in determining source credibility. The access to other information is another important factor and is often one of the most difficult challenges for intelligence analysts.

Marked differences in the evaluation of the accuracy of information may occur between higher and lower echelons. The reason for this difference is because higher echelons, which usually have more sources of information and intelligence than lower echelons, have a greater opportunity to confirm, corroborate, or refute the accuracy of incoming data. Regardless of the source, the accuracy of incoming information should be evaluated at each echelon according to other information and intelligence available at that echelon. The evaluation process at lowest tactical levels may often be simpler, because of the lack of competing and contradictory

sources. Higher echelons can access more sources which often complicates rather than facilitates the resolution of issues.

The processing and production of information continues with analysis. It is during this phase of the intelligence cycle that information becomes intelligence. Analysis is the sifting and sorting of evaluated information to isolate significant elements with respect to the mission and operations of the unit. Analysis requires judgment and a thorough knowledge of the principles of military operations, the characteristics of the area of operations, and the enemy situation, to include enemy doctrine and past practices. Analysis often involves detailed research with greater difficulty caused by the increased volume of information. Individuals who analyze information must relate their efforts to the unit's mission to avoid needless expenditure of time and effort.

Integration is the combination of the elements isolated in analysis with other known information to form a logical picture; an hypothesis of enemy activities. In the process, more than one hypothesis may be formulated based upon existing intelligence.

In formulating hypotheses, the intelligence analyst avoids preconceived opinions and hypotheses based solely on personal experience or preference. The analyst attempts to adopt the role of the enemy commander in the development of

these hypotheses. After they are formulated, all hypotheses are analyzed and tested. Analysis of an hypothesis includes determining the indications that should exist if the hypothesis is a valid one. Testing includes verifying the existence or nonexistence of these indications within the limitation of available time and means. Integration may be a mental process completed in a few moments or it may be a lengthy process involving the collection and evaluation of a large volume of additional information.

The last step in the processing and production of information is interpretation. Meaning is deduced from the hypotheses developed; these are tested and considered valid as a result of integration. Interpretation is designed to answer the question: "What does this information mean in relation to the area of operations, the enemy situation, and the friendly commander's intent?" The answer provides a conclusion which can serve as a basis for determining future enemy courses of action and for keeping the intelligence estimate current."

Finally, although this discussion of the processing and production steps of the intelligence cycle have referred primarily to the terms information versus intelligence,

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<sup>12</sup>Several outstanding historical examples of evaluation and interpretation from U.S. Army forces fighting in North Africa in WWII are provided in Chapter 7 of Lieutenant Colonel Stedman Chandler and Colonel Robert W. Robb's Front-Line Intelligence (Washington, D.C.: Infantry Journal Press, 1946), 93-103.



another common reference is often made to "raw intelligence" versus "finished intelligence." According to Joint Chiefs of Staff Publication 2-0, raw intelligence is information that has been collected but not further developed through analysis, interpretation, or correlation with other intelligence. Finished intelligence is information that has been analyzed, integrated, interpreted, and evaluated.<sup>33</sup> In this thesis, the terms information versus intelligence will be used rather than raw intelligence versus finished intelligence.

### **3. Types Of Intelligence and Analysis**

Within the intelligence community there are three general types of analysis: descriptive, explanatory, and predictive or estimative. Descriptive analysis comprises the great bulk of all military intelligence. Descriptive analysis provides the basis for explanatory and predictive analysis. Descriptive analysis attempts to manipulate data by accumulating, sorting, organizing, classifying, coding, etc. It answers the question of who, where, how much, how big, how organized, etc. Historical and current observations are examined and utilized to describe the characteristics of things, events, and statements. Accuracy of descriptive analysis depends primarily upon the accuracy and completeness

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<sup>33</sup>Joint Chiefs of Staff Publication 2-0, Joint Doctrine For Intelligence Support To Operations (Washington, D.C.: Office of the Chairman of the Joint Chiefs of Staff, Proposed Final Draft, undated), II-4.

of the data. Therefore, the primary requirement of the analyst is to ensure that the information derived is an accurate portrayal of the available data. Moreover, descriptive analysis can be described as data driven analysis. ~~The~~ results of this type of analysis leads to the production intelligence products such as intelligence surveys, ~~hand~~books, maps, order-of-battle studies, annotated charts and photographs, etc.<sup>14</sup> This category also includes answers to all manners of Requests for Information (RFI's), which are generated in great volume when a crisis erupts. Much of this information resides in various databases at different levels of classification at various echelons within the U.S. intelligence community or from unclassified open sources.

Explanatory intelligence seeks to explain why an event happened by relating it to causal factors, putting it into wider context of time and place, and explaining why the event is important.<sup>15</sup> Explanatory analysis attempts to make data understandable, and therefore, useable. It is based more on analytical judgments about the data rather than just describing it. The primary task of the analyst conducting

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<sup>14</sup>James D. Hammond, "So You Want To Be An Intelligence Analyst!" (Masters Research Paper, Defense Intelligence College, 1983), 8.

<sup>15</sup>Ronald D. Garst, ed., A Handbook of Intelligence Analysis, second edition, (Washington, D.C.: School of Professional Studies, Defense Intelligence College, 1989), 96.

explanatory analysis is to seek a plausible explanation that is satisfactory in regard to the available evidence.<sup>35</sup> Products resulting from explanatory analysis include assessments, analytic comparisons, special studies, etc. This type of analysis is much more difficult than descriptive analysis and requires higher and more complex thinking and reasoning skills.

Predictive analysis is based upon both descriptive and explanatory analysis. Predictive analysis attempts to answer the question: "What is most likely to happen and why?" Logically, predictive analysis results in a prediction or forecast. Predictive analysis is by far, the most difficult type of analysis, yet the type often expected of even the most inexperienced intelligence analyst. In tactical analysis at the lowest echelons, this can be accomplished somewhat more easily based upon a simple analysis of the terrain, weather, and relative enemy strengths, weaknesses, capabilities, and limitations relative to friendly forces. This problem and challenge expands exponentially at the operational and strategic levels of analysis.<sup>37</sup> The ultimate challenge to

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<sup>36</sup>Hammond, 9.

<sup>37</sup>Although geared toward strategic intelligence analysis, detailed explanations, examples, and suggested methods for accomplishing all three types of analysis are found in Stephen J. Andriole, Methods for Intelligence Analysis, Production, and Presentation (Washington, D.C.: Defense Intelligence College Handbook), Chapters 9-11. Sherman Kent's Strategic

the intelligence analyst is to be able to make that leap from descriptive and explanatory analysis to sound predictive analysis and to avoid Townsend's characterization:

Any G-2's chances of telling what the enemy is going to do are actually no better than anyone else's--the man in the street, some student, or a hermit.<sup>38</sup>

#### **4. Levels of Intelligence and Analysis**

For purposes of this thesis, three levels of intelligence and analysis will be considered: strategic intelligence, operational intelligence, and tactical intelligence. Joint Publication 2-0 provides the following definitions of these three levels. Strategic intelligence is that required for the formulation of strategy, policy, and military plans and operations at national and theater levels. Operational intelligence is that required for planning Service and joint operations. Tactical intelligence is that required for planning and conducting tactical operations.<sup>39</sup>

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Intelligence For American World Policy (Princeton, New Jersey: Princeton University Press, 1949) also provides a classic explanation in a chapter each of these three basic types of analysis. Again, although discussed in a strategic intelligence analysis context, the explanations provide one of the very best descriptions of these three types of analysis. The principles apply to all levels of intelligence analysis.

<sup>38</sup>Elias Carter Townsend, Colonel, Infantry, U.S. Army, Risks: The Key to Combat Intelligence (Harrisburg, Pennsylvania: Military Service Publishing Company, 1955), 4.

<sup>39</sup>Joint Pub 2-0 (Draft), GL-20, GL-23.

In the Marine Corps, tactical intelligence relates primarily to those units at Division, Wing, and Force Service Support Group and below. Tactical intelligence often focuses on fleeting opportunities and, thus, depends on rapid reporting, sometimes without the luxury of multiple sources. Operational intelligence is primarily the concern of Marine Expeditionary Force level units acting either as a Marine Component or as a joint task force, although both tactical and strategic levels of intelligence are to varying degrees (situation dependent) also of concern. Intelligence at this level demands more careful scrutiny of information. Strategic intelligence is primarily within the purview of the Marine Corps' service level intelligence organizations both at Headquarters, U.S. Marine Corps, and at the Marine Corps Intelligence Activity. Delineation of these levels of concern and various fusion organizations are found in Chapter III.

### **C. ALL-SOURCE INTELLIGENCE, FUSION, AND TAILORED INTELLIGENCE**

All-source intelligence, all-source fusion, and tailored, all-source fusion are terms which are used with increasing familiarity although they actually mean many things to many people. This is the case for both intelligence and nonintelligence personnel both inside and outside the military intelligence community. A look at all three concepts provides a necessary framework for the rest of this thesis.

## 1. All-Source Intelligence

All-source intelligence is defined in Joint Pub 2-0:

intelligence products and/or organizations and activities that incorporate all sources of information, including, most frequently, HUMINT, IMINT, MASINT, SIGINT and open source, in the production of finished intelligence.<sup>40</sup>

This definition serves as a useful departure for an examination of this term which is actually a concept. The concept actually should more appropriately be called multiple source intelligence since it is a misnomer to ever believe that all sources of information will be available to answer the intelligence question at hand. What it does imply is that all available sources of information obtainable at that echelon have been incorporated into the finished intelligence assessment at any given time.

The ints listed in the definition are those most often readily accessible to intelligence personnel at a joint level (national or theater). The following list of ints provides a more inclusive look at the various sources of information and intelligence which should be incorporated into all-source analysis whenever available and pertinent:<sup>41</sup>

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<sup>40</sup> Joint Pub 2-01, GL-5.

<sup>41</sup>Armed Forces Staff College Publication 2, Service Warfighting Philosophy and Synchronization of Joint Forces (Norfolk, Virginia: National Defense University, 1992), II-5-B-7. For a full definition of each of these ints, see Joint Pub 1-02.

* IMINT	-Imagery derived intelligence
* PHOTINT	-Photographic intelligence
* SIGINT	-Signals intelligence
* COMINT	-Communications intelligence
* ELINT	-Electronic intelligence
* FISINT	-Foreign instrumentation SIGINT
* HUMINT	-Human resources intelligence
* MASINT	-Measurement and signature intelligence
* ACINT	-Acoustical intelligence
* OPINT	-Optical intelligence
* IRINT	-Infrared intelligence
* NUCINT	-Nuclear intelligence
* RINT	-Unintentional radiation intelligence
* RADINT	-Radar intelligence

Although this contemporary list of ints could lead one to believe that all-source fusion is a relatively new concept, both Clausewitz and Jomini accepted that not all reports are reliable and that multiple sources of information were desirable. Jomini stressed the need to use multidimensional information systems, in a sense making him the progenitor of modern all-source intelligence:

A general should neglect no means of gaining information of the enemy's movements, and, for this purpose, should make use of reconnaissances, spies, bodies of light troops commanded by capable officers, signals, and questioning deserters and prisoners.... Perfect reliance should be placed on none of these means.<sup>42</sup>

Both in Napoleon's time and today, a multitude of sources are of little use unless they have been fused.

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<sup>42</sup>Henri Jomini, The Art of War, trans. G. H. Mendell and W. P. Craighill (Westport, Connecticut: Greenwood Press, 1977), 274 quoted in Victor M. Rosello, "Clausewitz's Contempt for Intelligence," Parameters XXI (Spring 1991): 109.

## **2. Fusion**

Fusion is defined in Joint Pub 2-0 as: "...the process of examining all sources of intelligence information to derive complete assessment of activity."<sup>43</sup> This is a somewhat restrictive definition in that it limits the concept to examining all sources as they relate to assessment of activity. A more useful, inclusive definition is: "The blending of intelligence information from multiple sources to produce a single intelligence product."<sup>44</sup> Fusion is essentially another word to encompass the entire concept of what occurs during the Production step of the intelligence cycle. It is this definition and understanding which is used in the rest of this thesis.

## **3. Tailored Intelligence**

While many references are made to tailored intelligence, there appears to be no formal definition of the term in military intelligence related publications and references. According to the American Heritage Dictionary, tailored in this context is defined, "to make, alter or adapt for a particular end or purpose." Tailored intelligence is simply intelligence made or adapted specifically for a particular consumer with particular intelligence requirements.

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<sup>43</sup>Joint Pub 2-0 (Draft), GL-12.

<sup>44</sup>MAGTF Intelligence Operations, WW-9.



This concept is particularly important to an understanding and appreciation for the strengths and weaknesses of various intelligence agencies' reporting/focus throughout the intelligence community at both national and theater levels. It is also important in understanding why the Marine Corps has been striving to expand their organic capabilities to produce all-source, fused, tailored intelligence.

#### **D. SUMMARY**

All-source fusion and tailoring of intelligence is a much more complex concept and process than most who have not had to do it understand. The efficient and accurate processing of information is a challenge in and of itself, let alone performing the complex reasoning skills necessary to convert a mass of often conflicting, incomplete, and questionable information into pertinent, timely, usable, fused and tailored intelligence. In the military, it should never be forgotten that information is not processed and intelligence is not produced for any other reason than to support commanders in their decision making process. While the requirements may vary widely from echelon to echelon, the goal of Marine Corps intelligence is to provide to commanders and other consumers the very best possible all-source, fused, tailored intelligence from all the information accessible at each echelon. Today, any number of factors are seriously impeding

our ability to do this. The responses from the first question in this author's questionnaire survey bear this out. When asked, "Overall, how adequately do you feel we accomplish all-source fused intelligence in the Marine Corps?," 27 percent of the 147 respondents replied not very adequately; 40 percent responded somewhat adequately; 25 percent responded adequately; only 3 percent responded very adequately; and none responded extremely adequately. (Five percent chose not to respond at all.) The remaining chapters seek to explain the major reasons why.

### III. STRUCTURE, ORGANIZATION, AND MANNING

Planning analysis is largely a matter of planning people, and planning people for intelligence analysis can be as difficult as planning machines and organizations.

Bruce D. Berkowitz and Allan E. Goodman<sup>45</sup>

#### A. INTRODUCTION/FACTORS

No other factors are more important in the effort to develop an all-source intelligence analysis capability than organizational structure and manning of those organizations. Without sufficient organizational structure and adequate manning of that structure, no amount of data or connectivity to all-source information will accomplish the goal of providing all-source fused, tailored intelligence to Marines. In fact, ongoing efforts to increase the connectivity pipeline with the corresponding potential to access large volumes of data only exacerbates the problem if the organization is not in place to take advantage of the increased access. What then is the "right" organization of limited resources to accomplish the goal of all-source fused intelligence support? What should be the manning priority? What should be the mix between intelligence billets within the Marine Corps and external to the Marine Corps such as in national and theater

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<sup>45</sup>Berkowitz and Goodman, 22.

level organizations? What effects are ongoing Department of Defense intelligence reorganization initiatives having on all-source fused intelligence support to Marines? These questions are examined in this chapter.

## **B. BACKGROUND**

As outlined in Chapter I, in 1988 the Marine Corps decided to focus its effort to enhance all-source fusion capability structurally and functionally at the Service level with the creation of the Marine Corps Intelligence Center, and at the operational level with the creation of MAGTF All-Source Fusion Centers. A slightly more detailed look at both these organizations and the framework within which they have had to operate provides necessary perspective for further discussion of how structure, organization, and manning of Marine Corps intelligence affects all-source fusion analysis capabilities.

### **1. Marine Corps Intelligence Center**

When the Marine Corps Intelligence Center (MCIC) was created, the Marine Corps was the only U.S. military service that did not have its own intelligence center capable of analyzing, tailoring, fusing, and producing all-source intelligence. The original goal was to have a dedicated, service level all-source intelligence center focused on expeditionary and amphibious intelligence support to Fleet

Marine Forces.<sup>46</sup> The MCIC's eventual official mission statement published on 29 June 1991 in the Table of Organization promulgation, expanded that mission to include:

...will provide tailored intelligence and services which: support the Commandant of the Marine Corps (CMC) and his staff in his role as the Marine Corps member of the Joint Chiefs of Staff; support the development of service-unique doctrine, force structure, training and education, and acquisition policy and programming; and support Fleet Marine Force contingency planning and other requirements for intelligence products which are not satisfied by either theater, other service, or national research and analysis capabilities (author's emphasis). Ensure all supported elements of the Service receive timely and concise intelligence which emphasizes the threat, terrain, and other considerations specifically pertinent to the mission of the Marine Corps and which are applicable to the areas of the world in which the Marine Corps can expect to conduct expeditionary operations.<sup>47</sup>

Together with the generalized mission statement was a listing of nineteen separate tasks. Eighteen of those tasks were related to supporting service level intelligence decision-making and functioning within the Washington, D.C. national arena and supporting tenant commands and activities at the Marine Corps Combat Development Center, Quantico, Virginia.

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<sup>46</sup>Beans, "Marine Corps Intelligence in Low Intensity Conflicts," 28.

<sup>47</sup>Headquarters, U.S. Marine Corps, "USMC Intelligence Center Table of Organization 7451," (Washington, D.C.: Headquarters, U.S. Marine Corps, 29 June 1991), 1.

The single task related to supporting Marine operating forces stated:

Provide research, analysis, and tailored intelligence products for Fleet Marine Force contingency planning, training, and ad hoc requirements *which are not satisfied by theater, national-level, or other-service intelligence capabilities* (author's emphasis).<sup>43</sup>

The caveat "which are not satisfied by theater,...." was added to avoid duplication of effort within the intelligence community, since funding was sought from national intelligence community budgets for civilian analysis billets at the MCIC.

When created, the Marine Corps Intelligence Center used the Marine Corps officer and enlisted billets from organizations and billets which already existed at Quantico. In addition, nearly two thirds of the billets created were earmarked as civilian positions, funded both by the Marine Corps and by the General Defense Intelligence Program (GDIP). This is in marked contrast to the steps taken to man the MAGTF All-Source Fusion Centers (MAFCs).

Since its inception, the MCIC has accomplished all-source analysis in support of the aforementioned mission and the nineteen tasks. The majority of effort at the MCIC has been related to strategic level intelligence support, encompassing broad picture predictive estimates relative to

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<sup>43</sup>Ibid., 2.

the general nature of the threat. <sup>49</sup> It applies to Marine Corps operating forces, and day-to-day general intelligence support to Washington and Quantico area Marine Corps consumers.<sup>49</sup> Specific support to Fleet Marine Force elements has included production of unclassified Mobile Training Team country handbooks for various countries of interest, deployment (author's emphasis) threat analysis briefings for Marine Expeditionary Unit staffs, as well as a number of contingency support products for Marines deployed to several recent hot spots including Somalia.<sup>50</sup>

On 1 January 1993, the Commandant of the Marine Corps redesignated the Marine Corps Intelligence Center as the Marine Corps Intelligence Activity (MCIA), National Maritime Intelligence Center (NMIC), Suitland, Maryland. The MCIA has absorbed the Marines at the various Navy intelligence activities at Suitland and reformed them into an Expeditionary

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<sup>49</sup>See Alfred M. Gray, Commandant of the Marine Corps White Letter 2-91 dated 27 Jun 91 for General Gray's description of the Marine Corps Intelligence Center and his vision for it four years after he had directed its establishment. This was one of General Gray's last official pronouncements before retiring as Commandant.

<sup>50</sup>Once any Marine unit deploys from garrison as part of a Navy or Joint Task Force, it falls under operational control of that unit and all intelligence support is to be provided through that new operational chain of command, back up through the CINC level JIC and then to the National level if necessary. Technically, if that chain of command cannot satisfy a particular intelligence requirement, only then can the requirement fall upon a service level intelligence organization.

Warfare Support Division. The Marine Corps Intelligence Activity has also been tasked with delegated production responsibility for Appendix E (Antilanding Plan) of various Defense Intelligence Military Capabilities Studies scheduled for production each year. As per their charter and mission, the MCIA continues to remain focused primarily on all-source fused intelligence support at the national service level, with ad hoc contingency support to Marine operating forces allowed technically only when not satisfied by theater, other service or national research and analysis capabilities.

## **2. MAGTF All-Source Fusion Centers**

Operational and tactical level all-source fused intelligence support to Marine operating forces in the Fleet Marine Force became the purview of the Surveillance, Reconnaissance and Intelligence Group in each of the three Marine Expeditionary Forces (MEFs)--specifically, in a brand new organization called the MAGTF All-Source Fusion Center (hereafter referred to as MAFC). The mission of a MAFC was:

...to provide fused, all-source intelligence to MAGTF commanders, and other commanders as directed. The MAFC, as a consolidated, closely knit group of intelligence officers and specialists will provide the intelligence necessary to support contingency planning and current intelligence/threat requirements of the MEF (Marine Expeditionary Force), its subordinate MAGTFs, and other commanders as directed. During operations and exercises, the MAFC will provide the intelligence necessary to support future operations and plans, deliberate targeting, and development of enemy situation and capabilities. It



will process information from both organic collection and reporting, and from external agencies.<sup>51</sup>

This mission statement reflected the operational and tactical level emphasis of these organizations.

Although the line numbers for each of the 50 billets in each of the MAFCs was acquired somewhat differently, all 150 billets total were structured with compensatory reductions from other Fleet Marine Force units. The billets came from various existing force structure billets in the then six existing Marine Expeditionary Brigades (MEBs) and from each of the three MEF Command Elements, three Marine Divisions, three Marine Aircraft Wings, and three Force Service Support Groups (FSSGs). The centralization of the all-source fusion effort in a MAFC supporting each MEF reflected a Marine Corps decision that such a move was a worthwhile investment in terms of both structure and manning to increase overall all-source fusion analysis capability, albeit at the expense of structure and manning in other units.

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<sup>51</sup>Headquarters, U.S. Marine Corps, Fleet Marine Force Manual 3-26 (Coordinating Draft): The MAGTF All-Source Fusion Center (MAFC) and All-Source Fusion of Intelligence (Quantico, Virginia: Marine Corps Combat Development Command, 1992), 1-5. This draft publication has not been approved for publication as of this writing and is currently on hold while Marine Corps intelligence structure is being reviewed for possible reorganization.

The three MAFCs were identical in structure with a Table of Organization of 12 officers and 38 enlisted.<sup>52</sup> MAFC billet composition reflected the mission of the organization and was heavily weighted with unrestricted intelligence officers and enlisted intelligence analysts. In addition, there were billets for an officer and enlisted signal intelligence specialists, an officer and enlisted counterintelligence specialists, and enlisted imagery interpreters. The total of 50 also included six enlisted billets to operate and maintain the Intelligence Analysis Center (IAC).<sup>53</sup>

Around the activation dates of each of the three MAFCs, personnel from each of the aforementioned units in the Marine Corps were transferred to the respective MAFC with the official shift in billet structure following a year or so later when the final Table of Organization was approved at Headquarters Marine Corps. The Marine Corps believed that by pooling the analytical effort in a MAFC, all-source fused intelligence would be produced and disseminated back to all of these units which had given up both billets and manning to

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<sup>52</sup>Although there were several iterations of the T/O, the last one promulgated was T/O 4707 dated 23 May 1991.

<sup>53</sup>The IAC was a Vietnam era developed computer system of several separate large shelters (vans) designed to provide automated intelligence support. These systems never reached their potential and have been totally phased out of the Marine Corps. The follow-on system is the Intelligence Analysis System (IAS) currently being fielded throughout the Marine Corps.

serve this goal. All-source fusion analysis and production is manpower intensive at the MEF level. A MEF must focus on both operational and tactical level intelligence in support of ground, air, and combat service support units through the entire depth of an assigned area of responsibility. This breadth of responsibility coupled with access to not only all Marine organic collection asset reporting but to theater and national asset reporting as well, constitutes the most complicated all-source fusion analysis challenge for intelligence analysts at any level in the Marine Corps.<sup>54</sup>

During its evolution as a completely new organization, the proposed concept was for the MAFC to serve primarily as an all-source fusion analytical center in garrison which during crises would then provide personnel to *augment* existing MAGTF intelligence staff sections at both the MEF and MEB levels.<sup>55</sup> This was to provide primarily an *added* all-source fusion

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<sup>54</sup>In actual crisis situations, a tremendous amount of time is spent deconflicting contradictory reporting from the numerous "assessments" being arrived at by other services and agencies. This is a necessary part of the business of intelligence work but is a hidden drain on limited manpower assets.

<sup>55</sup>Augmentation to one or two MEBs was under the old MEF deployment scheme of deploying as MEBs into an AOR with one of the MEBs serving as the MEF Forward until the main MEF Headquarters could deploy into the region. The MAFC would split out detachments to one or two MEB Command Elements for initial deployment but reconstitute as an entire MAFC in support of the MEF after the MEB Command Elements combined with the MEF Command Element.

analytical capability to the supported MAGTF G-2 section. In practice, both before and during Desert Shield/Storm, personnel who deployed as part of a supporting MAFC detachment were needed by the supported units to fill empty billets throughout the G-2 sections, not just analytical billets. This reflected the lingering impact of having pulled bodies from these MAGTF units to originally form the respective MAFCs. Furthermore, the concept did not include providing analysts back to the divisions, wings, or force service support groups who had given up analyst billets and bodies to form the MAFCs in the first place.<sup>56</sup> However, the larger contributing problem was the overall low peacetime manning levels of the units in the first place, a particular problem for the intelligence MOS in the Marine Corps.

### 3. Manning Policy<sup>57</sup>

Despite the objective of the Marine Corps manpower process to provide the appropriate number of adequately

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<sup>56</sup>The 2d MAFC did provide one officer and four enlisted analysts to the 2d Marine Division for Desert Storm. This was under the caveat in the MAFC mission which stated, "and support to other commanders as directed."

<sup>57</sup>The author hesitates to address an extremely complex process in such an extremely abbreviated fashion. However, the generalizations made herein are the author's based on 23 March and 25 May 93 interviews with Major Bill Philbin, Headquarters Marine Corps, C4I Branch, Intelligence MOS Specialist, and a 25 May interview with Major Angie Salinas, Headquarters Marine Corps Manpower Branch (MMOA-1) Ground Assignments Monitor.

trained, sufficiently experienced, usable Marines to the commander to perform his mission, undermanning was identified by survey respondents as the single most contributing factor inhibiting the ability to accomplish all-source fused intelligence analysis.<sup>58</sup> Although manning challenges are extremely complex in general, manning the intelligence field is particularly challenging due to the proportionally high number of external billets compared to Fleet Marine Force (FMF) billets.

Roughly one fourth of Marine intelligence officer billets are external to the Marine Corps, i.e., in joint, naval, or other agency billets. These billets are called "excepted" and are manned at 100 percent and are filled with the best possible fit by rank and experience. Defense Intelligence Agency analyst billets and all Unified Command J-2 billets are examples in this category. The next category for manning is called "priority" and reflects those billets in the Marine Corps which are manned at 100 percent, although not necessarily at the exact rank structure designated. The Marine Corps Intelligence Activity falls into this category, as do all seven Marine Expeditionary Units (MEUs). Finally, the rest of the FMF falls under what is called "proportionate

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<sup>58</sup>Manpower process objective taken from the first slide of a Headquarters Marine Corps instructional briefing entitled, "The United States Marine Corps Manpower Process or, Manpower 101.

share commands." After all excepted and priority command billets are filled, whatever is left in the manpower pool is then directed to fill the proportionate share commands in the FMF. The result of these manning priorities and a continuing overall shortage of intelligence personnel results in serious manning deficiencies for MEF, Division, Wing, FSSG, and SRI Group units. These units are generally manned at around 50 percent with efforts to "flush out" the intelligence sections with reserve or regular augmentation during exercises and crises. This serious undermanning problem directly or indirectly affects training, assignments, focus of effort, and the ability to automate the intelligence effort. The effects of this manning policy, and overall short manning situation in the FMF, on all-source fusion analytical capability became only too apparent during operation Desert Shield/Storm.

#### **4. Operation Desert Shield/Storm<sup>59</sup>**

Other than a number of MEB and MEF level exercises, the MAFC concept of all-source fused intelligence support was not fully tested until Operation Desert Storm at which time a lesson was relearned from World War II: "the compilers of the

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<sup>59</sup>Hereafter throughout this thesis, reference to "Desert Storm" will mean the period covered by both Desert Shield and Desert Storm.

tables of organization have not favored the 2 (intelligence), and in battle personnel becomes a major problem."<sup>60</sup>

Because of the way by which the MAFC billets were manned prior to Operation Desert Storm, major subordinate commands (the Marine ground divisions, aircraft wings, and FSSGs) as well as the MEB and MEF Command elements which deployed were short of personnel. Although the 2d MAFC was "fat" with all 50 T/O billets manned at the outbreak of the conflict, the unit was fragmented to provide support to other deploying units.<sup>61</sup> Three officers and 10 enlisted were deployed in August 1990 as augmenters to the 4th MEB for immediate deployment to the Persian Gulf. An additional one officer and four enlisted were provided to 2d Marine Division to shore up their personnel situation. Since the II MEF Command Element did not deploy to Southwest Asia, the majority of the remainder of the 2d MAFC, deployed in January as augmenters for the I MEF G-2 section.

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<sup>60</sup>Stedman Chandler and Robert W. Robb, Lieutenant Colonels, U.S. Army Military Intelligence Reserves, Front-Line Intelligence, (Washington, D.C.: Infantry Journal Press, 1946), 87.

<sup>61</sup>The term "fat" is used because of the unusual circumstance of having all 50 billets filled in peacetime for a wartime Table of Organization. However, at the outbreak of Desert Shield, all-source fusion analytical capability was limited for any number of other reasons elaborated on in the remainder of this paper.

The 1st MAFC had deployed to Southwest Asia in August in direct support of the I MEF G-2, and initially provided all of I MEF G-2's analysts and most of its targeting and collections personnel despite being manned at only 50 percent.<sup>62</sup> Like all MEF Command Element G-2 Sections (and other G-staff sections), I MEF had to count on significant augmentation to flush out its wartime billet structure. Unfortunately, even when composited (staffs combined) with the 7th MEB G-2 section, the I MEF G-2 was critically short of personnel.<sup>63</sup> Additional augmenters were provided from 1st MEB in Hawaii and eventually in January 1991 from the 2d MAFC along with reservists called to active duty. It was not until 16 January that the Analysis and Production section was staffed with its final number of 23 personnel out of the 33 people it rated by T/O.<sup>64</sup>

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<sup>62</sup>Michael H. Decker, "Assessing the Intelligence Effort," Marine Corps Gazette, 75 (September 1991): 23.

<sup>63</sup>In the early 1980s the Marine Corps had developed an operational doctrine which in general terms counted on the compositing or combining of two deployed MEB staffs with the nucleus staff of a follow-on MEF Command Element to form a composite full MEF staff over a Division, Wing, and FSSG. The concept was to deploy in increments as MEUs and MEBs and employ as a MEF level MAGTF. During Desert Storm, the amphibious 4th MEB remained embarked at sea as a USCF/COM reserve while only the 7th MPF (maritime prepositioned force) MEB was available initially for compositing with the I MEF nucleus staff.

<sup>64</sup>Peter Morosoff, Lieutenant Colonel, U.S. Marine Corps, Marine Expeditionary Command and Control in Southwest Asia (Quantico, Virginia: The Marine Corps Research Center, 1991).



The effects of this piecemeal augmentation effort on the G-2 Analysis and Production (A&P) Section were disruptive to the analytical effort. Personnel showing up at different times throughout the buildup were placed into the A&P Section and took over various billets due to rank and were not necessarily the best qualified to hold those positions. In many cases, new arrivals did not have the benefit of working the problem from the beginning and accordingly, lacked proper perspective. The Marine Corps stresses the value of teamwork and of "knowing your personnel." Nowhere is this more important than in coordinating the efforts of personnel engaged in conducting all-source fusion analysis. The strengths and weaknesses of each analyst must be known in depth to ensure the proper assignment and utilization of that individual in the analytical team effort. Clearly, this cannot happen effectively when unknown personnel, regardless of experience or talent, show up in a staggered manner and are piecemealed into the all-source fusion analytical problem. However, if the section is undermanned to the point where "any warm body" is a help if for no other reason than to perform basic recording and other processing functions, then augmentation is beneficial. When queried whether "personnel,

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24, Research Paper No. 92-0005. The opinions and conclusions of the report are those of the author and do not necessarily represent the view of the Marine Corps Research Center or any other governmental agency.

augmentation (regular or reserves) to fill empty line numbers (billets) immediately prior to major exercises or actual developing crisis situations enhances ability to conduct all-source fused intelligence analysis," 60 percent of the survey respondents strongly agreed or agreed while 34 percent disagreed or strongly disagreed, and 6 percent had no opinion or failed to respond. Part two of the same question asked how long in advance augmenters should arrive to be really useful. Two thirds of the respondents said one or more months. This is seldom achieved in the Marine Corps today, since developing crises rarely provide that kind of lead time nor can the expense of augmenters (time and money) be afforded that far in advance for exercise augmentation. Respondents' believed that augmentation at the last minute before or even during a crisis, was actually counterproductive. However, many stated that any help is appreciated due to the very low manning levels.

For the I MEF G-2 A&P Section in Southwest Asia, even when eventually fully augmented, the demands of operating 24 hours a day and just accomplishing the many processing and dissemination tasks seriously eroded the overall all-source fusion analytical effort. In an examination of the intelligence effort immediately after the war, one major finding was:

Discussions with commanders and intelligence personnel indicate that the MEF did not provide fused intelligence adequately tailored to the needs of the tactical commander. Intelligence products lacked clear analysis of enemy activity and reporting was primarily focused on the operational versus tactical level....

...The MEF was burdened with a staggering volume of information and did not have the personnel, ADP, or communications assets to adequately process and disseminate that information (author's emphasis).<sup>55</sup>

Challenged to just process and disseminate the vast amounts of raw information and finished intelligence from other agencies, the *all-source fusion analysts* were hard pressed to accomplish the most vital and difficult component of the entire intelligence process--all-source fused, tailored intelligence.<sup>56</sup> Within all the constraints, the analysts did a very credible job, particularly at the operational/tactical level of detail required to support the MEF Commander and his

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<sup>55</sup>F.D. Houston and P.J. Nagy, Majors, USMC, Intelligence Operations in Southwest Asia (Quantico, Virginia: The Marine Corps Research Center, 1991), 10, Research Paper No. 92-0008 (Part No. 1). The opinions and conclusions of the report are those of the authors and do not necessarily represent the view of the Marine Corps Research Center or any other governmental agency. The complaint of operational focus at the expense of tactical was a common complaint outside the Marine Corps as well. See U.S. Department of Defense, Conduct of the Persian Gulf War: Final Report to Congress, Appendices A-S, April 1992, C-13.

<sup>56</sup>See Nagy and Houston, page 3 for a discussion of the challenges of handling the raw information flowing into I MEF. They cite an average figure of 1200-1400 general service (GENSER) messages, plus an additional 1600-1800 special intelligence (SI) and recorded voice messages per day, leading up to the ground war. The total daily number increased to 6000 to 8000 daily during the ground war.

staff. When asked about tactical intelligence in an interview for the August 1992 Armed Forces Journal, Lieutenant General Walter E. Boomer, the I MEF Commander for Desert Storm, responded:

First of all, I don't think we had an intelligence failure. For example, I knew where all of the Iraqi units, by name, were located, with few exceptions, and that doesn't happen without good intelligence.<sup>67</sup>

Finally, during Desert Storm, other theater components could rely on their respective service level intelligence centers for dedicated tailored intelligence support. MARCENT/I MEF did not have a dedicated fusion center at the service level, since the Marine Corps Intelligence Center was still under its initial development.<sup>68</sup>

Despite the organizational upheaval caused by the formation of the MAFCs, the piecemeal deployment and

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<sup>67</sup>Glenn W. Goodman, Jr. and John G. Roos, "An Exclusive AFJJI Interview with Lt. Gen. Walter E. Boomer, USMC," Armed Forces Journal International (August 1992): 38.

<sup>68</sup>Houston and Nagy, 5. Within existing capabilities at the time, the Marine Corps Intelligence Center did provide intelligence support to Marines in Washington, D.C. and Quantico. Because of the size and scope of Operation Desert Storm, and the fact that the U.S. Central Command J-2 was hard pressed to support the CINC, other service level intelligence organizations as well as many other DoD intelligence organizations rushed to provide any type support they were capable of and for which a perceived or actual need existed. One of the lessons learned was that these efforts were not well coordinated and there was both duplication of effort and gaps in effort. Many of these lessons learned have driven the new DoD intelligence architecture/reorganization.

integration of various sections and individuals, the analytical efforts at various levels, and the tremendous volume of information which had to be dealt with, all-source fusion analysis was in fact accomplished, albeit not as effectively as many desired. Fortunately for the I MEF G-2, the Iraqis allowed the United States the luxury of time to piecemeal together a functioning all-source fusion analytical effort. This will not always be the case in future crises.

### **C. POST DESERT STORM/CURRENT SITUATION**

#### **1. Intelligence Study Group Findings**

Between 19 and 30 August 1991, the Marine Corps reconvened an Intelligence Study Group (ISG) with representatives from throughout the Marine Corps to continue an examination of intelligence deficiencies identified before the Desert Storm experience. The group's first key conclusion was that the intelligence structure in the Marine Corps was inadequate. Furthermore, that to provide adequate intelligence support, all intelligence structure must be manned. Under the section of their report titled Organizational Architecture, the group:

validated the SRI Group concept but also indicated a strong belief that creating the SRI Group's MAGTF All-Source Fusion Center (MAFC) by stripping the MSC headquarters of virtually all their intelligence analysts sorely inhibits flexible and timely analytic response to changing key intelligence requirements at the MSC level....

...At each of the tactical level commands there is a need for intelligence analysts. In addition to supporting their own level these analysts can assist subordinate levels through the provision of tailored intelligence product. The personnel required to handle the volume of data available from an analytic standpoint must be further augmented at higher levels in order to have the capacity to also provide tailored support downwards.<sup>69</sup>

The study group also recommended that the MAFC must be opcon to the MEF G-2, a situation which would give the MEF G-2 direct tasking authority and control.

The report continued:

The immediate conclusion of the group was that intelligence manning in the Marine Corps is totally inadequate. In order to achieve adequate intelligence support, there is a personnel cost which simply must be paid. Without a significant increase in the number of personnel throughout the Marine Corps, there is no hope for any major improvement in the quantity or quality of support provided.<sup>70</sup>

The structure and manning deficiencies cited in their report left little doubt as to why all-source fused, tailored intelligence analysis was not occurring effectively at all echelons.

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<sup>69</sup>R.J. Mastrion, Director, Intelligence Study Group, Marine Corps Combat Development Command, Quantico, Virginia memorandum and attached Intelligence Study Group Findings, 3800 dated 18 Oct 91, TMD (photocopy), 13(not numbered).

<sup>70</sup>Ibid., 16(not numbered).

## 2. Battle Rostering

After his experience in Southwest Asia, and later while serving as the Commanding General, Marine Corps Combat Development Command, General Boomer stated that, "The greatest deficiency I saw was that the MEF headquarters, as it was organized for peacetime, was not sufficient to fight a large campaign 24 hours a day for an indefinite period of time."<sup>71</sup>

He also stated that:

We have now beefed up the MEF headquarters in terms of people. But we can never give it every person in peacetime that it should have in wartime. The way we're taking care of this is through a battle roster program. When some officers assume their jobs here at Quantico, for example, they are also being assigned another one in writing that says, 'You will be deployed to the I MEF in this capacity if it goes to war, so start to study and learn about your additional duty. Periodically, you're going to exercise with them.'<sup>72</sup>

This Battle Roster plan is designed to take care of personnel deficiencies in a MEF T/O.<sup>73</sup> In theory the only

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<sup>71</sup>Goodman Jr. and Roos, 38.

<sup>72</sup>Ibid.

<sup>73</sup>The various MEF headquarters have received both billets and some personnel from the Marine Expeditionary Brigade headquarters which have been disbanded as part of the overall downsizing requirements mandated on the Marine Corps as part of the DoD downsizing. In terms of intelligence personnel, this has actually been rather transparent at the MEFs, particularly since there is a concurrent effort to increase the structure and manning of the former type commands FMFPAC and FMFLANT into newly created Component Command Headquarters in both the Pacific and Atlantic (COMARFORPAC and COMARFORLANT).

way that it will help the all-source fusion analysis effort is by filling all the other holes in the MEF G-2 section so existing analysts from the MAFC can be essentially guaranteed to remain in their analysis billets and not be pulled off to other duties in the G-2, (if they have not been already in garrison--see Current Situation/Initiatives below). Of course, all of this is dependent on the effectiveness of the Battle Roster concept and that its actual implementation comes close to meeting the actual personnel requirements of a MEF headquarters preparing for contingency operations. Again, it is not only the personnel numbers that count, but that those who show up are the right rank to be effectively integrated in a non-disruptive manner, and experienced in the duties of the billet upon which they will be thrust. This whole concept is problematic, but particularly so if the challenges and difficulties of MEF G-2 analyst billets are considered.

Although the Marine Corps has chosen the Battle Roster plan, at least in the short term, to solve personnel deficiencies at the MEF HQ, Colonel Bruce Brunn, Marine Corps Combat Development Center C4I Officer, outlined a number of problems which limit the overall effectiveness of this program.<sup>24</sup> Among these are that it does not adequately

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<sup>24</sup>Bruce Brunn, Colonel, U.S. Marine Corps, C4I Officer, interview by author, 24 March 1993, Handwritten notes, Marine Corps Combat Development Center, Quantico, Virginia.



address many of the other personnel requirements generated in a MEF level contingency operation, i.e., Division, Wing, Force Service Support Group; CINC and JTF augmentation (including the Joint Intelligence Centers at each level); as well as Liaison Officers for other services and agencies. When all these competing requirements for personnel augmentation arise during crisis situations, there are just not nearly enough personnel to go around. Additionally, because of the short lead time in many actual crisis commitments, the battle roster personnel will most often not show up in time to be available to assist in predeployment intelligence support to Marines preparing to deploy to the crisis area. This is the same time when analysts are in short supply and great demand.

When questioned in the survey as to whether or not the battle roster concept was a good solution to the undermanning problem of the MEF G-2 sections, just over half the respondents disagreed or strongly disagreed while 36 percent agreed and only 3 percent strongly agreed. The majority of those who agreed offered qualifying comments. They believed that this should be just a short term solution. Of those who disagreed, most felt that this was a "rob Peter to pay Paul" approach and that the "team needs to be developed before the game." The team effort of the entire G-2 has direct effects on the efficiency and quality of all-source fusion analysis produced as the result of that team effort. Battle rostering,

or any other augmentation scheme does not promote an efficient, coherent, overall intelligence effort, specifically when it comes to all-source fusion analysis.

### **3. DoD Intelligence Reorganization**

DoD intelligence reorganization initiatives had already started before Desert Storm as a result of the collapse of the Soviet/Warsaw Pact threat in the late 1980s. The National Defense Authorization Act for Fiscal year 1991 directed the Secretary of Defense, together with the Director of Central Intelligence (DCI), to conduct a joint review of intelligence and intelligence-related activities to:

eliminate redundancy; strengthen joint intelligence support to combatant commands; improve threat assessments for acquisition programs; ensure that intelligence priorities reflect the changed security environment; and improve the responsiveness and utility of national intelligence systems and organizations to the needs of combatant commands.<sup>75</sup>

Lessons learned from Desert Shield/Storm significantly affected the reorganization decisions made by DoD in response to this directive from Congress.

The reorganization initiatives were wide ranging and affected all facets of defense intelligence. That which most directly affected all-source fusion analysis support to

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<sup>75</sup>Senate Armed Services Committee, "Report of Department of Defense Organization and Management," excerpt of, published in American Intelligence Journal 12 (Autumn 1991): 15.

Marines was the decision that to best strengthen intelligence support to combatant commanders, analysis centers of the Unified and Specified Combatant Commands and their components would be combined into Joint Intelligence Centers (JICs) under the control of designated Unified and Specified CINCs.<sup>76</sup> The U.S. Pacific command was cited as an example of how, over the years, three separate processing and analysis centers had existed to support USCINCPAC and the components.<sup>77</sup> A Pacific Command Joint Intelligence Center was formed and served as a model for consolidation efforts within the other Unified and Specified Commands.<sup>78</sup>

Within the Department of the Navy, the Naval Maritime Intelligence Center (NMIC), was commissioned on 1 October 1991. It combined three former commands--CTF 168, the Naval Technical Intelligence Center (NTIC), and the Navy Operational Intelligence Center (NOIC), plus elements of the Naval Intelligence Activity (NIA). In a July 1992 report titled

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<sup>76</sup>Duane Andrews, Assistant Secretary of Defense (C3I), "Restructuring Defense Intelligence," American Intelligence Journal 12 (Autumn 1991): 5.

<sup>77</sup>Ibid, 6.

<sup>78</sup>Ibid. See same article for elaboration of similar consolidations at U.S. European Command and U.S. Atlantic Command. For a discussion of restructuring initiatives in USCINCLANT, USCINCPAC, USCINCENT and the Office of Naval Intelligence, see also U.S. Naval Intelligence Bulletin, Summer 1992 for a series of articles in a Section titled "Restructuring to Meet the Challenge."

"Strategic Planning for The Office of Naval Intelligence: Vision and Direction for the Future," the Director of Naval Intelligence Rear Admiral Edward D. Sheaffer Jr., provided visions and goals for ONI in maritime intelligence. Among the points Admiral Sheaffer made were the following:

- \* A major Defense Intelligence restructuring by which the current, political, military and operational support traditionally provided to U.S. Navy Commands and operating forces by Fleet Intelligence Centers and Fleet Ocean Surveillance Information Centers manned by the Navy is now the responsibility of Joint Intelligence Centers manned by Army, Navy, and Air Force personnel.

- \* ONI's ongoing intelligence role is now defined as providing basic and background maritime intelligence for the JICs; providing support to Department of the Navy RDT&E, acquisition and training functions; providing maritime S&T and general military intelligence support to many branches of Government; and support for certain unique national level programs.

- \* The scope and focus of ONI are thus upon the broader maritime intelligence vice naval intelligence, including civilian as well as military activities as well as relevant environmental and scientific and technical data.

- \* Apply all of ONI's national maritime intelligence capabilities in the context of on-demand service to consumers, vice products. ONI's primary focus shall be on quality of service and timely response to consumer's requests."

While this Naval Intelligence reorganization serves several purposes, not the least of which is refocusing from the former Soviet naval threat to a broader maritime intelligence

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"Edward D. Sheaffer, Jr., Director of Naval Intelligence, "Strategic Planning for the Office of Naval Intelligence: Vision and Direction for the Future," (Office of Naval Intelligence: Suitland, Maryland, July 1992), 2,3.

mission, capabilities for direct all-source fusion analysis support to deployed Marines may actually decrease with the potential loss of the dedicated naval intelligence support traditionally provided by the likes of FOSIF Rota and FOSIF WESTPAC Kamiseya.

While in the throes of intelligence reorganization at all levels, the Marine Corps has continued to be employed in numerous contingency operations. During all of these, jointness has been the order of the day, with respective JICs tasked with providing all-source fused analytical support to Marine and other component commands, as well as Marines themselves being put in the position to provide all-source fused analytical support to joint forces.

#### **4. Impact of Joint Operations**

In the case of Operation Restore Hope in Somalia during this past year, I MEF provided the JTF Headquarters nucleus in Mogadishu, Somalia, including personnel to man the JTF JIC. Earlier, during October and November 1991, II MEF provided the JTF Headquarters nucleus for JTF-140 formed under USCINCLANT for possible contingency operations in Haiti. These recent forays into the joint operating arena have provided additional lessons for the Marine Corps regarding our ability to provide all-source fused analytical support.

The biggest lesson learned has been that with the existing inadequate structure and low FMF manning levels, the

difficult problem of simply flushing out a deploying MEF G-2 section is seriously exacerbated when there exists a concurrent requirement to provide personnel to a JTF JIC. Extensive personnel augmentation is required to man the nucleus of a Joint Task Force JIC together with the added requirements to man and operate a Marine Component Command intelligence section (MEF or smaller). While numbers vary depending on the situation, the Marine Corps is only able to satisfy the requirements by drawing not only from non-FMF billets such as those identified in the Battle Roster plan, but from numerous other noncommitted FMF units throughout the Marine Corps. To say the least, this ad hoc method of providing the requisite numbers of intelligence personnel is not conducive to good intelligence work in general, and specifically to all-source fusion analysis and production efforts.

As an example, during contingency preparations for the crisis in Haiti, the 2d MAFC was tasked with providing the personnel and much of the equipment to set up the nucleus of the JTF JIC created to support JTF-140. Much of the effort was focused on simply integrating other service personnel, preparing for embarkation, and scrambling to provide basic encyclopedic data (descriptive intelligence). As a result, at the JTF level, all-source fusion analytical effort was

seriously degraded.<sup>80</sup> The USCINCLANT JIC did provide all-source fused analytical support throughout the crisis period, including a liaison team with direct connectivity back to the CINCLANT JIC in Norfolk.

While official lessons learned from the I MEF Somalia experience are still pending, initial assessments of the intelligence effort there reflected that the number one deficiency was inadequate intelligence structure, staffing (manning), and training. The deployed MEF and Division Headquarters G-2 sections required early and significant personnel augmentation numbering over 250 personnel, including analysts. Many of the augmenters arrived late and others were not well suited to the mission at hand. One of the augmenters, Major Steve Hasty, the OIC of the 3d MAFC in Okinawa, related that, "Somalia once again underlined our need for more and better trained analysts." Again, fortunately, the MEF and JTF were thrust into a relatively benign environment and had time to iron out the "wrinkles."

Although ongoing efforts to iron out joint doctrine and issues such as forming and operating JTFs is proceeding, the Marine Corps' contribution to the intelligence effort in a joint environment will remain a major challenge simply in terms of raw personnel numbers. Even in instances when

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<sup>80</sup> Author's experience as the JTF-140 J-2 Operations Officer.

another service is responsible for forming the nucleus of a JTF JIC, the Marine Corps still is tasked with providing intelligence personnel, including analysts, to fill line numbers in that organization. As long as JTFs remain ad hoc, these joint billet personnel requirements will continue to sap an already undermanned and overstretched Marine Corps intelligence capability. All-source fusion and analysis in these types of environments will remain a formidable challenge, often requiring over dependence on higher echelon all-source fusion efforts, at least initially, until the personnel and organizational situation stabilizes. This approach to intelligence support below the CINC level erodes the potential direct all-source fusion analysis support provided by Marines for Marines.

#### **5. Current Situation/Initiatives**

In response to a United States Senate Committee on Armed Services directive to submit a report for improving Marine Corps intelligence capabilities, the Marine Corps recently published an April 1993 document entitled "United States Marine Corps Intelligence Roadmap."<sup>1</sup> The report outlines overall deficiencies, progress, and planned actions in the areas of manpower, education and training, and

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<sup>1</sup>Headquarters, U.S. Marine Corps, "United States Marine Corps Intelligence Roadmap 1993-1998." (Washington, D.C.: Headquarters, U.S. Marine Corps, C4I, April 1993). TMD [photocopy], 1-26.



equipment. The first conclusion is that manpower and structure are the most critical deficiencies facing Marine Corps intelligence today. A number of statistics are provided that clearly reflect the extent of the problem:

- \* The 0202 MOS is experiencing critical shortfalls across all grades and is projected to remain understaffed for the foreseeable future.

- \* MOS 0231, Intelligence Analyst, the largest MOS for enlisted personnel, is 16 percent understrength and is also expected to remain understrength over the next few years.

- \* The problem is more acute at specific grade levels. The current inventory of 0202 Majors and Lieutenant Colonels fills 68 percent and 77 percent of authorized billets, respectively.

The Roadmap cites, as an example of continuing demands, the Intelligence Study Group report detailing the significant structure and manning shortfalls within the Marine Corps, while pointing out that in the past two years the Marine Corps has been asked to fill an additional 21 officer and 27 enlisted intelligence-related external billets. These billets include support to the newly formed JICs and other joint organizations. The report also mentions increased staffing requirements for the MCIC, NMIC, and the component command staffs mentioned earlier.

The Roadmap offers a number of temporary solutions to the personnel problem but concludes: "if the Marine Corps does not seriously reexamine the internal and external intelligence personnel requirements in light of future force drawdowns,

organizational change, and burgeoning requirements in the joint arena, such near term methods will be unsuccessful."<sup>82</sup>

The Marine Corps is also developing a Marine Corps Concept for Intelligence Support to Expeditionary Operations to be published in the summer of 1993. It will provide the philosophical basis for improving Marine Corps intelligence capabilities in concert with the dynamic changes taking place within the Marine Corps, the Department of Defense, the National Intelligence Community, and the world at large.<sup>83</sup> This concept will provide the foundation upon which Marine Corps intelligence will most likely be restructured.

In the short term, the Marine Corps Intelligence Activity continues to slowly expand its capabilities, in no small part because of increased civilian analyst billets authorized and paid for with GDIP money. However, focus will remain on strategic level all-source fusion with ad hoc contingency products developed as required.

Also in the short term, as a result of recommendations from the Intelligence Study Group and other force structure initiatives, the MAFC billets and T/O line numbers have been rolled into the MEF G-2 Section in a current proposed T/O change at Headquarters Marine Corps. In anticipation of

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<sup>82</sup>Ibid., 9.

<sup>83</sup>Ibid., 1.

formal approval of this initiative, on 1 June 1992, 2d MAFC personnel were assigned from the 2d SRI Group on an extended temporary additional duty basis to II MEF G-2. This has simplified the working relationship between the MAFC and II MEF G-2, but has eroded the MAFC's analytical capability. Currently, as few as nine of the 24 2d MAFC personnel are actually working as analysts. The rest are distributed throughout the MEF G-2 to fill other functional billets in targeting, plans, collections, administration, etc. 1st and 3d MAFCs are scheduled to fall under direct opcon of their respective MEF G-2 sections as well, with similar results likely.

The Marine Corps is writing a prescription for failure by staffing the MEF level all-source fusion organization, which was designed to have 50 people, with as few as ten or so. Ten people, even if they were the best ten the Marine Corps had to offer, cannot read, process, fuse and analyze the volume of traffic they should be receiving in garrison, let alone what they would receive in a developing or actual crisis.

Reorganization continues at all levels within DoD Intelligence. The DIA has formed the National Military Joint Intelligence Center (NMJIC) in Washington, D.C. among whose tasks include all-source, fused, tailored, intelligence support. Based on the survey responses, comments from Marines

who have been exposed to NMJIC reporting reflect that this organization is providing very useful all-source fused intelligence support.

Theater JICs are also receiving generally favorable comments. JCS is in the process of finalizing a joint publication which will standardize doctrine for joint intelligence support.<sup>84</sup>

One of the costs to the Marine Corps associated with the national and theater reorganization efforts is that over the past two years, the Marine Corps has been asked to fill an additional 21 officer and 27 enlisted intelligence-related external billets.<sup>85</sup> These requests have come during the same time in which the Marine Corps Intelligence Study Group identified the serious internal structural deficiencies outlined above. While the Marine Corps fully supports the move to jointness in the intelligence arena and views these agencies as providing essential support to MAGTFs, these billets must be filled at the expense of the FMF.<sup>86</sup>

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<sup>84</sup>Tentative publication to be numbered and titled Joint Pub 2-02. Joint Tactics, Techniques, and Procedures (JTTP) for Intelligence Support to Crisis Operations (U).

<sup>85</sup>"Intelligence Roadmap," 9.

#### **D. SUMMARY AND QUESTIONNAIRE RESULTS**

Manning and structure, respectively ranked number one and two by the survey respondents, are the most serious factors inhibiting Marine Corps all-source fusion efforts. This is particularly true below service level. In a time of increasing demands and commitments, the Marine Corps must make some hard decisions on where the focus of main effort will be for all-source fused, tailored intelligence support for Marine operating forces. Although the efforts at the national and theater levels are encouraging in respect to levels and quality of all-source fused analysis support to operating forces, one of the most serious deficiencies when relying on national and theater level all-source fused analysis support is that tactical level information and reporting is not included in the all-source fusion analysis. Given the realities of jointness, and a host of other considerations, the Marine Corps must determine how to best structurally organize and man to optimize all-source fusion analysis support to Marine operating forces.

The first substantive questions in the survey questionnaire were designed directly or indirectly to measure current views related to intelligence structure and manning issues. Generalizations follow with the detailed total percentages available in the Appendix.

### **1. Impact of Structure and Manning**

When asked, "Overall, what do you think most inhibits our ability to best do all-source fused intelligence analysis?", respondents were asked to rank order six factors. Manning levels was ranked number one and structural impediments was ranked number two.

### **2. Marine All-Source Fusion at What Levels**

When asked, "With the current intelligence structure and manning, true, all-source fused intelligence analysis is accomplished at what level(s)?", the leading responses were 65 percent MEF level; 42 percent MEU level; and 37 percent Service level (Marine Corps Intelligence Activity). The high response rate for the MEU level reflects the common knowledge amongst Marines that deployed MEUs are at the "pointy tip of the spear" and receive some of the very best intelligence personnel, equipment, and other miscellaneous support.

When asked, "Realistically, at what level(s) should we strive to develop a true, all-source fused intelligence analysis capability?" The response reflected a concern for the MSCs. The top three responses were: 77 percent MEF level; 59 percent MEU level; and 43 percent Division/Wing level. Service level was named by only 27 percent.

### **3. Increases in All-Source Fused Intelligence**

When asked, "Have any of the recent past/current intelligence reorganization initiatives increased the level of

all-source fused intelligence support your unit/echelon has received?" The number one response, with 35 percent, was Theater JICs. Second, was "Not Apparent," cited by 33 percent of the respondents. Third, was MAGTF All-Source Fusion Centers with 27 percent, followed by the Marine Corps Intelligence Activity with 20 percent.

#### **4. MAFCs as Positive Step**

Given the statement, "The creation of the MAGTF All-Source Fusion Centers at each SRIG was overall a positive step toward enhancing Marine Corps capabilities to produce all-source fused, tailored intelligence," the respondents were asked to agree or disagree. Two thirds strongly agreed or agreed while only a fourth disagreed or strongly disagreed. Eight percent had no opinion.

#### **5. JICs as Improvement to All-Source Fusion**

Given the statement, "The recent emphasis on Joint Intelligence Centers at the Theater and Joint Task Force levels as the focal point for all-source fusion/one-stop shop intelligence support for operating forces will improve all-source fused, tailored intelligence analysis support to Marine forces," again the respondents were asked to agree or disagree. 60.5 percent strongly agreed or agreed while 28.6 percent disagreed or strongly disagreed. 8.8 percent had no opinion and there was no response from 2.0 percent.

## **6. Manning Priority Change Affect**

Given the statement, "All-source fused intelligence support to Marine forces would be improved if manning priorities changed to emphasize manning of FMF intelligence billets at the expense of external billets/supporting establishment billets," opinion was evenly divided, with 43 percent strongly agreeing or agreeing and 45 percent disagreeing or strongly disagreeing. Surprisingly, the response differences of opinion were evenly spread between those officers in joint billets, non-FMF supporting establishment billets and FMF billets. No clear trends emerged except the largest single response was disagree with 36 percent. Those that disagreed more often commented on the value of having Marines in joint billets both to influence the support provided to Marines from external intelligence agencies and to gain valuable intelligence exposure and experience.



#### IV. TRAINING AND EDUCATION

When serving as future intelligence officers they understand that training, particularly intelligence training, is going to be their primary function in the postwar Army. Moreover, this enthusiasm reflects the common opinion of these experienced soldiers that intelligence training was not conducted with maximum effectiveness before and during World War II; and that this phase of training must be conducted more efficiently in the event of future war.

LtCols Robert R. Glass and Phillip B. Davidson<sup>87</sup>

...and implicit in this changing threat is the requirement to train and educate all of our Marines, especially our intelligence specialists, to respond to these non-traditional challenges.

General Alfred M. Gray<sup>88</sup>

##### A. INTRODUCTION

No other aspect of military intelligence is more difficult yet more important to the entire process than analysis and all-source fusion. Yet Marine Corps intelligence officers receive little formal training or education in intelligence analysis. Like the other factors identified in this thesis, the general lack of specific training and education in all-source fusion analysis is simply a symptom of a much larger

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<sup>87</sup>Glass and Davidson, 123. Chapter 10 of their book Intelligence is for Commanders is entitled "Intelligence Training" and cites lessons learned from the experiences of World War II.

<sup>88</sup>Gray, "Global Intelligence Challenges in the 1990's," 4.

disease--the lack of overall intelligence training and education. Not only is formal school training and education insufficient, but garrison and field training come up short as well. This chapter examines a number of training and education factors, both formal and informal, which affect the overall ability of Marine intelligence analysts to conduct all-source fusion analysis. Some current Headquarters Marine Corps initiatives relating to Marine Corps intelligence training are also examined to assess the potential impact on all-source fusion intelligence analysis capabilities.

## **B. FACTORS FOR CONSIDERATION**

### **1. Can You Teach Intelligence Analysis?**

There are those who say that analysis cannot be taught--that it is an art rather than a science. Yet the Marine Corps teaches the art of war at all levels of its professional military education program. The art of intelligence analysis can also be taught to the degree that any art can be taught. There are also any number of basic skills of analysis which can be taught. In his research on intelligence analysis while attending the Defense Intelligence College in 1983, Marine Major James D. Hammond concluded that all analysts early in their careers (preferably before their first analytical assignment), should be required to take a course devoted to basic analysis where they would be exposed

to certain basic analytical skills/topics.<sup>89</sup> Although the focus of his research was at the strategic level, the following skills/topics he identified are equally applicable to the conduct of intelligence analysis and all-source fusion at operational and tactical levels: orientation to analysis as it fits in the intelligence cycle; oral and written communication skills;<sup>90</sup> research skills;<sup>91</sup> psychology of analysis including personal values, perceptions, prejudices, biases, and other social and cultural considerations; problem solving skills; reasoning and logic skills; analytic methodologies; and practical considerations for analysts, a seminar type exposure discussion opportunity with experienced analysts to discuss the balance between theory and "real world" aspects of analysis.<sup>92</sup>

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<sup>89</sup>Hammond, 28.

<sup>90</sup>Navy Lieutenant Commander Sara Scott, the Defense Intelligence College Intelligence Analyst Program Manager responsible for analyst training at the Defense Intelligence College, told the author in a 25 March 1993 interview that the students she taught in the various analysis courses had "weak, pathetic, abysmal writing skills."

<sup>91</sup>While "research" may appear to be a simple concept, intelligence research can be extremely complicated depending at what echelon the analyst is at and what type intelligence product is required. For the most comprehensive examination of this process, see Jerome K. Clauser and Sandra M. Weir, Intelligence Research Methodology, (State College, Pennsylvania: HRB-Singer, Inc., 1976).

<sup>92</sup>Hammond, 27-35.

Another excellent discussion of the qualities or facets involved in the process of operational intelligence analysis from a Navy perspective is found in "Some Thoughts for Naval Intelligence Officers" by Captain F. P. Notz USN. His list includes experience; initiative and intuition; action/reaction; coincidence; anomalies; pattern analysis; time line analysis; track analysis; quantitative analysis; probability analysis; and comparative analysis.<sup>93</sup> While qualities like experience and initiative and intuition cannot be taught, the other concepts and processes listed by Captain Notz can be and are taught.

## **2. Formal Training**

The Defense Intelligence College offers a number of specific intelligence analysis training courses including a three week intelligence analyst course, a two week counterdrug intelligence analysis course, and a two week counterterrorism analysis course.<sup>94</sup> Although tailored more for strategic level analysis, these courses have received much praise from the few Marine officers and enlisted who have had the opportunity to attend one or more.

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<sup>93</sup>F.P. Notz, "Some Thoughts For Naval Intelligence Officers, November 1988" TMs [photocopy], pp. 31-34.

<sup>94</sup>Defense Intelligence College, Catalog--Academic Year 1992-1993, (Washington, D.C.: Defense Intelligence College, 1992), 74-77. See also page 156 for a listing of analysis courses which are taught as part of the Postgraduate and Undergraduate Intelligence Programs taught there.

Intelligence analysis and all-source fusion are complex processes but there are any number of facets and components within these processes which can be and are formally taught. The question is, how many of our Marine officers receive specific formal training or education in analysis and/or all-source fusion?

Marine Officers attending the Marine Air Ground Task Force Intelligence Officer (Basic) Course taught at the Navy and Marine Corps Intelligence Training Center (NMITC) receive a comprehensive introduction to Marine Corps tactical intelligence. The emphasis is almost exclusively on tactical level processing and analysis skills.<sup>96</sup>

When asked to list any specific or general analytical training they had received that directly contributes to their abilities as analysts, only six of the 147 officers named specific military intelligence analysis courses: five analysis courses at the Defense Intelligence College (four as a part of the Post Graduate Intelligence Program, and one not clearly defined) and one mention of a deception course offered by the CIA. Also mentioned twice was the Army Intelligence Course at Fort Huachuca, Arizona; and the MAGTF Intelligence

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<sup>96</sup>U.S. Marine Corps, "Marine Air Ground Task Force Intelligence Officer (Basic) Course (4210) 1-93 Outline of Instruction, 1993" TMs [photocopy], Navy and Marine Corps Intelligence Training Center, Dam Neck, Virginia Beach, Virginia.

Officer Course at NMITC was mentioned once. Although many other courses were mentioned, the only strong trend was reference to college and military/other U.S. Government area studies courses. When asked if there were any general or specific analysis courses they would recommend, the only trends were again for DIA offered courses and various regional or area studies courses such as the regional familiarity courses taught by the U.S. Air Force at Hurlburt Field, Florida. Of the 147 respondents, 137 had attended the Marine Corps Basic Intelligence Officer course at one time or another, and 35 had attended the Post Graduate Intelligence Program at the Defense Intelligence College or its predecessor, the Defense Intelligence School.

Clearly, other than the Defense Intelligence College, there are few analysis specific formal training courses available for Marine intelligence analysts.

As mentioned above, area studies and area familiarity were mentioned as generalized education which would benefit all-source fusion and analysis. Other services, particularly the Army, have a fully developed Foreign Area Officer (FAO) Program to provide officers specifically trained as area "experts." The Marine Corps also has a FAO program with formal study programs oriented toward four areas: Middle East/North Africa (Arabic); Far East (Chinese/Thai/Korean);

Former Soviet Union (Russian); and Latin America (Spanish).<sup>96</sup> The program is open to applicants from all MOS's and annually selects two individuals for each of the four areas who then take language training followed by a year of overseas study. Marine Corps intelligence officers are able to apply for this program. While one might expect that a fairly large number would be selected, such is not the case. For example, of the 147 respondents, only 15 have been designated Foreign Area Officers as a secondary or tertiary MOS. Although there are many reasons for the low number of FAOs in the Marine Corps, not the least of which is the expense in training them, it is often suggested that more FAOs assigned to intelligence analysis billets would enhance Marine Corps analytical capabilities. Survey respondents indicated by a ratio of nearly nine to one that more intelligence officers trained as FAOs and assigned to analyst billets would enhance Marine Corps abilities relative to all-source intelligence analysis. By a smaller three to one ratio, the respondents indicated that such would also be the case with more non-intelligence officers trained and assigned to intelligence analysis billets. While there were not many specific comments offered by the respondents, several indicated concern over the need to

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<sup>96</sup>Headquarters, U.S. Marine Corps, Marine Corps Order 1520.11D, Foreign Area Officer Program, C4I, 31 Dec 1992.

train non-intelligence FAOs the intelligence business before they could become fully effective:<sup>97</sup>

I work with Army FAOs daily. They routinely require two years OJT to become effective analysts.

(Capt, DIA)

While area expertise is helpful, it is only one of several skills needed to be an effective intelligence analyst. Instead of needing months to learn his area, the non-intelligence FAO would need months to learn intelligence mechanics.

(Maj, FAO student)

The key may be to assign the non-intelligence FAOs to intelligence billets where their area expertise can be utilized while at the same time they are "helped" with the intelligence aspects of the billet by other more experienced intelligence officers within the organization. The MAFCs would be a logical place for the assignment of FAOs, both intelligence and/or non-intelligence. Assignments of FAOs is addressed again in the next chapter.

### 3. On The Job Training

Those associated with the intelligence business acknowledge that regardless of any amount or quality of formal

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<sup>97</sup>The author shares these concerns based on his three year experience as a Soviet ground forces analyst at Headquarters, U.S. European Command working side by side on a daily basis with three Army non-intelligence Russian FAOs. For an excellent examination of the various military service FAO programs, including criticism of the Marine Corps program, see Randy P. Burkett, Captain, USAF, "The Training and Employment of Area Specialists in the Military" (Masters Thesis, Naval Postgraduate School, Monterey, California, June 1989).



education and training, there is no substitute for experience and "on the job training (OJT)" when it comes to intelligence work in general, and specifically to intelligence analysis and all-source fusion. Unfortunately, in most Marine Corps intelligence organizations, the opportunity to do all-source fusion with the same types and quantities of information required in crises just does not happen day-to-day. Even without all the organic tactical information collected during actual combat operations, there are many other sources of raw data and information that analysts could have access to, but generally do not, on a daily basis to assist in their training and understanding of "all-source" information.

Despite the creation of the MAFCs, many of the respondents said that they had never really performed "all-source fusion" until they were assigned to a theater or national level analysis billet. Then it was primarily learning by doing and experience "on the job." Given the aforementioned paucity of formal analytical training and education, OJT is the primary mechanism for learning all-source fusion analysis in the Marine Corps as well. Although the lower the echelon, the less complex the "analysis and all-source fusion" tasks and responsibilities in general, these processes are accomplished in one form or another at all levels during crises. If Marines are not formally schooled or trained effectively to accomplish these processes, then the

alternative must be on the job training. When asked, "As an occupational field, how well do we provide on the job training for 0202's and 0231's (enlisted analysts) relative to all-source fusion and analysis?" the survey responses were not encouraging. None said extremely well; only 1.4 percent said very well; only 15.6 percent said adequately; 49 percent said not very well; and 32 percent said poorly. Two percent had no opinion.

Although there may be many explanations for this, the most plausible is that as difficult and rare as it is to receive formal training or education in analysis and all-source fusion, it naturally follows that there are few trained and skilled officers or enlisted available to provide the OJT in the first place. Secondly, for those few who may have the skills, education, and experience to provide this type training, any number of other factors prevent this from being realized. Some of these other factors include the low overall manning levels already addressed, as well as assignment policy and billet requirements addressed in the next chapter. If analysts are not required or able to do the basics of analysis in day-to-day garrison activities, including all the basic processing skills and some levels of analysis, these skills atrophy or never fully develop in the first place. OJT starts in garrison, not in a crisis.

OJT occurs in many other aspects of intelligence work--simply not skills and training directly related to analysis and all-source fusion. The exceptions to this observation are Marines in joint analyst billets and those at the Marine Corps Intelligence Activity.<sup>98</sup> MAFC analysts in all three MEFs do have a certain amount of increased access to all-source information due to their echelon, however, chronic personnel shortages and other focuses of effort seriously dilute opportunities for analysis and all-source fusion OJT while in garrison. With limited opportunities for realistic operational and tactical level all-source fusion analysis training in garrison, what are the opportunities for realistic training during unit training evolutions, command post exercises (CPXs), or field training exercises (FTXs)?

#### **4. Exercises**

First, outside of MOS school, the Marine Corps conducts virtually no "intelligence-specific" training exercises related to all-source fusion and analysis. This has

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<sup>98</sup>Karin Dolan, GS-14, Chief, Threat Analysis Branch, interview by author, 24 March 1993, Handwritten notes, Marine Corps Intelligence Activity, Quantico, Virginia. Ms. Dolan emphatically stated that all-source fusion was accomplished at MCIA, although it was a difficult prospect given all the requirements together with the organization still growing in terms of numbers of analysts. However, all Marine Corps analysts assigned to MCIA were experienced, and civilian analysts were hired only after careful screening. Several of the civilian analysts are former Marine Corps intelligence officers with specific analytical skills, training, and experience.

often been mentioned as a goal of many of the author's fellow Marine Corps intelligence professionals (officer and enlisted). But given the shortages of personnel, other commitments, and lack of command emphasis, this is unlikely to happen any time in the foreseeable future. Another opportunity for realistic all-source fusion analysis training is during CPXs and FTXs. Again, reality generally dictates otherwise. This fact was supported by the survey respondents who when asked, "During CPXs and field exercises, how often is realistic all-source fusion analytical intelligence training integrated into the exercise?", only 1.4 percent (2 officers associated with Marine Expeditionary Units) said very often; 6 percent said often; 20 percent said sometimes; 60 percent said seldom; 11 percent said never; and 2 percent failed to respond.

Nearly every respondent made a comment on this emotionally charged issue. The following generalizations gleaned from the comments provide a feel for their concerns. Again, like so many other observations, the comments apply to not just analysis and all-source fusion, but to intelligence in general. The most common observation, and one that is certainly no revelation, is that exercises, be they CPXs or FTXs, are designed primarily to accomplish any number of training objectives other than the training of intelligence

personnel. The 1991 Intelligence Study Group (ISG) had resurfaced this continuing problem by noting:

Current Marine Corps training in CPX/FTX situations falsely represents intelligence capabilities. In order to ensure the smooth flow of other training evolutions, intelligence has usually been virtually all-inclusive and readily obtained. In reality, intelligence amounts to information which has been stolen from the enemy; it is not easy to obtain and will usually be of limited scope. For too long, realistic training has been sacrificed to ensure certain specific training objectives were obtained. CPX/FTX events must be made more realistic even if that means certain key events may not take place."<sup>99</sup>

Officers at all levels mentioned that despite some pronouncements that "intelligence drives ops," the reality is most often the reverse. Several exceptions were noted, specifically at the MEU level within the Marine Corps and at some major theater level exercises.

Another commonly expressed concern was that we (Marine Corps Intelligence) often tend to put our least experienced people in the exercise control groups, holding back our most experienced personnel to be the "players."<sup>100</sup> Effective

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<sup>99</sup>Mastrion, 3 (pages not numbered).

<sup>100</sup>For virtually every exercise at all levels of the Marine Corps and in the joint and national arenas, exercise control groups are formed some time prior to the actual exercise. Almost without exception, the exercise control group requires exercise participants to contribute personnel to serve in the control group as either scriptors of exercise traffic (data, messages, event lists, etc.) some time in advance of the exercise. Commands are generally unwilling to give up their "best" people to be "lost" for any timeframe prior to an exercise. In Marine Corps intelligence, chronic

scripting of realistic intelligence traffic (raw information) across all the disciplines (ints described in Chapter II), in both terms of quantity and quality, is a very manpower intensive and time consuming process even with vastly experienced exercise control group personnel. Without the proper investment in the exercise control group, improperly formatted or abbreviated intelligence messages often result, further diluting the training benefit for all-source fusion analysts. When this is the case, most "intel" messages are "canned" to fit a scenario which will drive the other exercise training objectives. Many of the questionnaire respondents complained of the strong tendency to receive "canned" message traffic with little need or opportunity for actual analysis. The unrealistically few intelligence messages input into the scenario are often "wheat" designed to drive the exercise play in a predetermined direction. Only in the most sophisticated scenarios, almost exclusively at the higher echelons, are there many "chaff" messages thrown in and then, nowhere near the amount of chaff an analyst is faced with in actual crisis situations. The net result is that analysts are spoon fed "intelligence," many times with only one message from one

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personnel shortages already strain most units and they are accordingly not willing to "play" the actual exercise with all the attention it commands without their best players. Hence, generally less experienced personnel are sent to augment the exercise control groups.

source that they need to use without further analysis or cross cuing of additional collection assets to confirm or deny the information's validity. Failure to use that one bit of "intelligence" often results in missing the "picture" the exercise control group is trying to paint to drive the rest of the exercise participants.

Overall, exercises are all too often just not sophisticated enough from an intelligence standpoint to force the analysts to do real analysis. When not forced to scrutinize the information received for pertinence, credibility, etc., the analysts suffer in two major ways. One they do not learn how to deal with "real" types and quantities of raw reporting. Two, operators and even some intelligence personnel fail to develop an appreciation for just how difficult all-source fusion intelligence analysis is to accomplish, and they become accustomed to having the intelligence puzzle conveniently put together with nearly all the necessary pieces to "see" the puzzle.

When faced with a deluge of actual crisis intelligence message traffic and other raw information in the proper, often lengthy and more complicated formats emerging from "sources" and types of reporting with which the analysts are unfamiliar, all-source fusion analysts' learning curves get very steep at a time when many other distractions also detract from the all-source fusion effort.

Even in those few exercises which attempt to provide realistic intelligence "play," at the MEF/MAFC and MSC level levels in particular, other factors erode whatever other limited all-source fusion analysis training opportunities may exist. These factors include not enough personnel to accomplish all other intelligence related tasks as well as not enough experienced personnel available to work as analysts.

Another factor worth particular mention is the effort to keep exercise scenarios unclassified in some instances (most often at lower echelons), and often only at the GENSER SECRET level. For analysts at echelons below Division and Wing levels the GENSER SECRET level is appropriate. However, exercises at this level are not uncommon at the Division/Wing level and MEF level, particularly for CPXs. Although this makes the exercise administratively and logistically easier for both scriptors and players, special intelligence information is either not integrated at all or is "sanitized" to GENSER level for ease of use and dissemination. Special intelligence (SI) reporting is extremely valuable for the conduct of all-source fusion analysis, and is not generally effectively integrated in Marine Corps intelligence scenarios. Again, MEUs are the general exception to this observation because of the Marine Corps' expenditure in assets to man, train, and equip these units at the "tip of the spear." With few other exceptions, notably some rare MEF level exercises,



these efforts to keep the classification level down in Marine Corps CPXs and FTXs is counterproductive to the effective training of all-source fusion analysts.

Of final note, the Marine Corps participates in very, very few force-on-force live play exercises. Many of the respondents pointed out that this type exercise play would provide the most challenging and realistic all-source analysis training possible. Given many constraints, not the least of which is budgetary, any improvement in this regard is also unlikely.

### **C. CURRENT SITUATION/INITIATIVES**

The Intelligence Roadmap mentioned in Chapter III, articulates a number of challenges ahead for the education and training of Marine Corps intelligence personnel. Those that will affect all-source fusion analysis capability include the decision to start sending 70 percent of all Marine Intelligence Officers selected for career level school (Captains/O-3) to the Army Military Intelligence Officers Advanced Course at Fort Huachuca, Arizona.<sup>14</sup> This 20-week course's focus is all-source intelligence. The course was revised and redesigned in 1990 and 1991 to correct two major deficiencies: a failure to train officers at the advanced

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<sup>14</sup> "Intelligence Roadmap," 14.

all-source level, and a failure to properly teach predictive analysis and synthesis.<sup>102</sup>

The Roadmap also noted that:

The Army used Intelligence Preparation of the Battlefield (IPB) to great effect during Operation Desert Storm, and post-war analysis indicated that it could easily be adapted to Marine Corps operational requirements. The DIRINT (Marine Corps Director of Intelligence) directed the incorporation of IPB into the NMITC curriculum and this was initiated during the summer of 1992. IPB has also been incorporated into the curriculum at AWS (Amphibious Warfare School) and Command and Staff College at Quantico.<sup>103</sup>

IPB is a planning and analysis process developed and used by the Army to aid the commander and staff in determining where and when to use limited resources to achieve decisive results. There are intelligence portions of this overall staff planning process which can be very useful in visualizing and predicting enemy activity with heavy utilization of graphic aids

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<sup>102</sup>Robert B. Mangold, Colonel, U.S. Army, "The New Military Intelligence Officer Advanced Course," Military Intelligence 18 (Jan-Mar 1992): 32. See also Wayne M. Hall, Lieutenant Colonel, U.S. Army, "Intelligence Analysis in the 21st Century," Military Intelligence 18 (Jan-Mar 1992): 8, for an extensive explanation of the author's concept of intelligence synthesis versus intelligence analysis. In short, the explanation offers that analysis is the pulling apart and examining of each of a number of parts, while synthesis is putting pieces of information together into a coherent meaningful whole, the parts of which fit together, and from that, making predictions. This is what is referred to in this paper as all-source fusion analysis, the end product of which should always be a predictive capability.

<sup>103</sup>"Intelligence Roadmap," 15.

primarily in the form of maps and overlays.<sup>104</sup> Although it is useful as a tool for the Marine Corps, the intelligence portions can be very manpower intensive. As noted by USMC Management Analyst Robert Steele:

In the case of the Army, personnel structure has been provided at the corps and division levels to support the labor-intensive IPB process. The same is not true of the Marine Corps, where intelligence structure is not only austere, but intelligence manning is severely constrained (not enough "faces" to fill too few "spaces")....

...Our commitment to the IPB process is worth stressing. The Commandant of the Marine Corps, addressing the Marine Corps Command and Staff College on 15 August 1991, stated that the Marine Corps would "do IPB." Our implementation of this direction has focused on ensuring that Marines understand the process and develop the products, but also strive to meet the substantive needs of the commander for fused analysis. IPB is not a substitute for analysis.<sup>105</sup>

The Army has five intelligence personnel for every one in the Marine Corps.<sup>106</sup> Since Marine Corps analysts have difficulty efficiently processing information with some analysis, the ability to "do IPB" effectively, after a crisis has developed, is in serious question. Although there are many positive aspects of the IPB process, not the least of which is

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<sup>104</sup>The Army has a complete doctrinal manual on this process: FM 34-120, Intelligence Preparation of the Battlefield dated May 1989. There is a current initial draft update of the same manual dated February 1993 expanding the applications of the process to most aspects of contemporary joint military involvement.

<sup>105</sup>Robert David Steele, 5.

<sup>106</sup>Bill Philbin, Major, U.S. Marine Corps, Headquarters Marine Corps Intelligence MOS Specialist, phone interview by author, 25 May 1993, Handwritten notes.

developing a closer operations/intelligence relationship, at division/wing or MEF levels, there just are not enough intelligence personnel to do the mechanical processes involved let alone the analysis and all-source fusion that should be accompanying it. Finally, it is one thing to go through the motions of IPB in a static, less than challenging CPX/FTX, but quite another within the context of a developing or actual crisis situation.

A number of other initiatives are outlined in the Roadmap including efforts to design and improve intelligence training during exercises. The report cited one specific "fusion related" accomplishment :

Integration of national systems support into Marine Aviation Weapons and Tactics Squadron (MAWTS-1) training exercises at Yuma, Arizona, where fused information from national, theater, and tactical collectors provided intelligence support to air crews in these exercises.<sup>107</sup>

Several of the survey respondents also cited this particular training as an example of specific analysis training they had received, and would recommend. Unfortunately, this type training is only available to a small percentage of Marine Corps intelligence personnel and is focused at aviation intelligence, only one aspect of the multidimensional all-source fusion effort required at the MAGTF level (MEF or MEU).

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<sup>107</sup> "Intelligence Roadmap," 15.

The Roadmap also cites plans to improve Marine Corps intelligence exercise training by encouraging commanders to conduct more "force-on-force" exercises that allow for free flow of events. At the same time, however, the report notes that Operations and Maintenance (O&M) funds to support training and exercises have been reduced making it increasingly important to better integrate intelligence training into every exercise. To say the least, this situation is problematic.

This cut in funding of O&M monies is accompanied by other budget cuts which have affected the amount of money available for non-MOS producing training and education. The net effect of these cuts is that there is much less money available for "short course" training such as the specific analysis and area familiarity courses mentioned earlier. Further anticipated budget constraints do not bode well for funding these type courses for Marine analysts. Headquarters Marine Corps is working to identify special training requirements tied to specific T/O billets. This proposal could go a long way in identifying specific analysis and/or area familiarity course training requirements for analyst billets, particularly for an organization like the MAFC. However, even if identified and formalized, the money to pay for the training must be forthcoming or the initiative will bear no fruit, and analysts will be no better trained than they are today.

#### D. CONCLUSIONS

Marine Corps intelligence officers receive little formal training specifically in intelligence analysis unless offered the opportunity to attend the Defense Intelligence College. With that opportunity significantly reduced, and with budgetary constraints likely to further reduce the opportunity to attend the several "short courses" which teach analysis, Marine intelligence officers will have to rely on service intelligence schools for whatever initial and follow-on formal all-source fusion analysis training they are likely to receive.

The prognosis for area familiarity training is likewise poor. Despite the attractiveness of more FAOs to enhance all-source fusion capabilities, with no anticipated changes in the FAO program, more FAOs are unlikely. Funding for area familiarity courses has already been cut severely, also reducing an avenue to educate all-source fusion analysts.

OJT is not effectively occurring except in joint or other external billets, and exercises are generally not providing realistic all-source fusion training.

The Marine Corps has acknowledged serious deficiencies in intelligence training overall, and is aggressively attempting to rectify the situation. All intelligence training and education must emphasize that the ultimate goal of the entire intelligence effort is to be able to provide all-source fused,

tailored intelligence to support Marine forces and other joint forces as required. Until this happens, all-source fusion analysis skills will remain weak at best.

## V. EXPERIENCE LEVEL AND ASSIGNMENTS

Do we look at previous analytic training or experience before assigning officers to analyst billets? An officer's previous analytical experience doesn't even break the noise level (when it comes to assignments).

Anonymous<sup>108</sup>

Inexperienced intelligence officers often lack the knowledge to harvest timely information from national sources as well as tactical sources.

Colonel Donald L. Kerrick<sup>109</sup>

You can't make a silk purse out of a sow's ear.

Unknown

### A. INTRODUCTION

Experience level and assignment policy are two additional factors which affect the all-source fusion analytical effort. Linked together, they were ranked by the survey respondents as the third leading impediment to the accomplishment of all-source fusion analysis. The general manpower shortage problems addressed previously, coupled with a tendency to assign the more experienced and qualified intelligence officers to external billets have a very significant impact on

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<sup>108</sup>An officer at Headquarters Marine Corps.

<sup>109</sup>Donald L. Kerrick, Colonel, U.S. Army, "5 Rules for the Intelligence Officer," Military Intelligence 16 (Oct-Dec 1990): 36.



the ability to accomplish all-source fusion analysis. Furthermore, assignment policies and constraints also limit the specific regional focus and accompanying experience which otherwise would enhance the all-source fusion analytical effort.

## **B. BACKGROUND/FACTORS**

### **1. Intelligence Personnel Initial Selection Criteria**

Although all-source fusion analysis is but one of the many responsibilities of an intelligence specialist, it is by far one of the most difficult skills to learn. And yet, does the Marine Corps carefully screen personnel before they come into the intelligence MOS to determine if the "right stuff" or aptitude exists in that person to allow them to go on and be a good intelligence professional in general and specifically a good analyst? The only two requirements/prerequisites currently to become an intelligence officer are:

- \* Must be eligible for access to sensitive compartmented information based on a special background investigation.

- \* Complete MAGTF Intelligence Officer Course, Navy Marine Corps Intelligence Training Center (NMITC), Dam Neck, Virginia.<sup>110</sup>

For enlisted intelligence specialists/analysts, MOS 0231, the only particular requirements/prerequisites are:

- \* GT (aptitude) score of 100 or higher.

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<sup>110</sup>Headquarters, U.S. Marine Corps, Marine Corps Order P1200.7M Military Occupational Specialties Manual, 12 March 1993, 1-6.

- \* Complete the Intelligence Specialist Course (entry level), NMITC, Dam Neck, Virginia.

- \* Must be eligible for access to sensitive compartmented information based on a completed special background investigation.

- \* Types a minimum of 25 words per minute.<sup>111</sup>

With the exception of eligibility for the special access security clearance, and the 25 words per minute typing skill for enlisted analysts, there are no other particular qualifications required. There are also no other formal mechanisms for intelligence personnel to screen 0202's and 0231's coming into the respective specialties. Once a Marine completes the MOS school at NMITC, they are considered qualified to fill any intelligence billet commensurate to his or her rank. With no other screening than this, many officers and enlisted end up in analyst billets without the necessary aptitude or experience to handle the job. Another enlisted intelligence MOS, 0211, Counterintelligence (CI) Specialist, has more stringent requirements/prerequisites including:

- \* Must be interviewed by a screening board of CI personnel in accordance with MCO 3850.1\_\_.

- \* Must possess a GT of 110 or higher.

- \* Must display command of the English language through both oral and written communication.

- \* Must be able to type a minimum of 30 words per minute.<sup>112</sup>

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<sup>111</sup>Ibid., 3-17.

<sup>112</sup>Ibid., 3-16.

There is every reason to believe that greater selectivity criteria such as this should be applied to the selection of 0202's and 0231's as well.

At one time or another, all 0202's and 0231's are called upon to do all-source fusion analysis. Yet, the necessary complex mental reasoning processes skills are not skills for which all people have a strong aptitude. Additionally, strong reading speed and comprehension skills, and writing and verbal communication skills are vital to the success of personnel engaged in all-source fusion analysis. Many Marine Corps intelligence officers and enlisted personnel have poor communication skills, and this seriously shackles the all-source fusion analysis effort. Those few who can write well get diverted from all-source fusion analysis and put into the production and dissemination business.

While measuring aptitude for analysis work is somewhat problematic, communication and reasoning skills are measured in tests like the Law School Aptitude Test (LSAT). The Marine Corps administers the Defense Language Aptitude Battery test to all Marines who desire to be selected for foreign language training. The Marine Corps could go a long way toward improving all-source fusion if more stringent screening and tougher prerequisites were mandated for personnel coming into the 0202 and 0231 MOS's, possibly including some type of

specific aptitude test designed to measure reading, oral and written communication, and basic reasoning skills.

## **2. Assignment Policy and Assignments**

As in every MOS, approximately one third of all Marine Corps intelligence officers are reassigned permanent change of station (PCS) every three years. The process of identifying which officers go to which billets is accomplished by the coordinated efforts of two branches at Headquarters Marine Corps. The Manpower Branch (MMOA) has the responsibility of actually making the final decisions and approving and issuing individuals' assignment orders. In the case of Marine Corps intelligence officers these decisions are coordinated with input and recommendations from the Headquarters Marine Corps MOS Specialist for 02's (Intelligence). As explained in Chapter III, all external billets are considered "excepted" and are required to be filled at 100 percent. Some of these external billets are nominative and there is a list of general and/or specific qualifications that the officer designated to fill the billet should optimally meet. This, plus the general demands of the billet, are factors which dictate which Marine from the pool of "available" officers will be slated for assignment to that billet. The Marine Corps makes every effort to send its best available qualified personnel to these external billets. In general, these are the only intelligence officers or enlisted specifically screened by Headquarters

Marine Corps prior to assignment to analyst billets. Officers and enlisted assigned to the FMF are simply assigned against the staffing goal "proportionate share" billet number requirements of various major commands. Once an individual reports to the command, he is assigned to a specific billet by that command. There are no billets in the Marine Corps specifically coded for individuals with specific analysis skills or experience. If an individual shows up at a command with particular analysis experience or area expertise, it is often largely by chance. While the assignment monitors at Headquarters Marine Corps attempt to place qualified people in appropriate assignments, an individual's analytical experience is usually not a factor considered unless the individual specifically identifies himself for a particular billet based on some particular expertise. Then, many other factors like rank, availability, "career progression," etc., usually weigh in more heavily in the final decision. The assignment monitors face an uphill struggle just matching faces to spaces, let alone worrying about whether or not some individual has "analysis" skills or background."

When questioned whether they had ever been assigned to a specific permanent or temporary intelligence billet because of any unique characteristic or experience related to specific

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"The author's monitor is responsible for over 1100 Ground Combat Service Support Majors in 17 MOS's.

analytical expertise, training, or education (including foreign language capability) only 30 percent of the survey respondents indicated that they had. However of that 30 percent, when they listed the billets or assignments, only about one third could be described as "related to any specific analytical expertise, training or education." This reflects the general low emphasis on identifying individuals with specific analytical experience/skills for placement in analysis related billets. Of particular note, not one single respondent mentioned assignment to a MAFC or the Marine Corps Intelligence Activity due to analyst skills or experience.

The Marine Corps certainly has any number of experienced intelligence analysts both officer and enlisted. However, since there is no subspecialty designator or other means for tracking or identifying such personnel, it is impossible to quantify this number. Most "analysts" are those who have done several tours of intelligence duty, often including a joint analyst assignment. However, these experienced "analysts" seldom continue to work in analyst specific billets, particularly in FMF assignments. When queried in the survey, over 75 percent of the respondents disagreed or strongly disagreed with the statement, "Within the Marine Corps intelligence field, our more experienced personnel (officers) generally work in analysis billets." The same statement regarding enlisted intelligence specialists had

just over half disagree or strongly disagree. While this indicates that the Marine Corps at least appears to do a better job of capitalizing on enlisted analyst expertise and experience, it still reflects a migration of experience away from analyst specific billets and duties. When asked to comment on where our more experienced personnel tend to be assigned, the answers for officers included: external billets; primary intelligence officer billets (unit intel officers, i.e., G-2, S-2); and other higher echelon billets such as G-2 operations officers and collections officers. For enlisted personnel, the comments included: "B" billets (recruiting, drill instructor, etc.); various G-2 administrative billets, and other senior positions like G-2 operations chiefs or unit intelligence chiefs. This is not a phenomena unique to the intelligence MOS, however, it does seriously erode the amount of skill and talent available for assignment to specific analyst billets.

As a case in point, the author volunteered for assignment to the 2d MAFC so the Marine Corps could capitalize on his experience as an all-source fusion analyst at Headquarters U.S. European Command. As a senior Captain expecting to fill a billet as a senior analyst in the MAFC, within weeks of his assignment he was designated as the MAFC Officer-in-Charge (OIC), a Lieutenant Colonel billet. The MAFC T/O for officers calls for a Lieutenant Colonel OIC,

three Majors, five Captains, two Lieutenants, and a Warrant Officer. For the Marine Corps intelligence field, this fairly heavy rank structure distribution reflects the requirement for experienced officers in this organization. Unfortunately, the 2d MAFC has never had more than one Major assigned at a time and with the exception of the author and one other Captain, has not had an officer assigned to it coming from a previous specific analyst assignment. In the summer of 1992, the 2d MAFC had a new lateral move Captain and two first lieutenants as the senior officer analysts, and two second lieutenants assigned, one just out of intelligence school and one waiting to attend MOS school.

Although the specific examples differ between the three MAFCs, the instances cited here are not unique to the 2d MAFC. In general, the overall experience level of officers assigned to the MAFCs has not been appropriate for the duties and responsibilities required by the billets within these organizations. For example, in the 1st MAFC's most recent deployment in support of Operation Restore Hope in Somalia, of the four 0202's who served there in the MAFC, three had graduated from NMITC less than eight months before, and the other one had less than two years experience in the intelligence field.

Earlier, the assignment of foreign area officers was discussed and the survey consensus was that more FAOs assigned



to analyst billets would improve all-source fusion analysis capabilities. There are no hard requirements to code any specific intelligence analysis billets in the Marine Corps for fill by FAOs. The Marine Corps Foreign Area Officer Program Order identifies numerous FMF billets, including "Intelligence Analysts, MAFC, SRIG," as appropriate FAO billets. The problem is that no specific billets are identified in any formal manner which would steer the assignments monitors to fill any particular billet or even particular SRIG (which is the lowest monitor command code to which analysts/FAO's would be generically assigned) with a particular type FAO.

While there is an acknowledged need for all-source fusion analysts and area expertise in the MAFCs, neither an intelligence nor nonintelligence officer FAO have been assigned to the 2d MAFC. The author is unaware if any FAO's have been assigned to the 3d MAFC. The 1st MAFC has fared somewhat better with several intelligence officer FAOs assigned since its activation. During Desert Storm, the 1st MAFC's senior analyst was an intelligence officer Arabic FAO who "could stand before the assembled general officers and accurately state that the enemy had no fire in the belly, and his infantry and artillery would put up little resistance when

closed with by U.S. Marines."<sup>114</sup> This example alone supports a conclusion that appropriate numbers and types of FAO's must be assigned to MAFCs to provide the much needed area expertise which is necessary to fully optimize all-source fusion analysis.

Another factor which affects analyst area familiarity is the Marine Corps' "career progression" assignment track. Certain combinations of different types of duty and formal professional military education is generally needed to be "competitive" for promotion. Back-to-back analyst billets would not necessarily be the right "combination" to show the individual's breadth of abilities. Although the first priority for the individuals concerned should be keeping them competitive for promotion, this overriding concern dilutes the possibilities of creating a core of very experienced analysts who could then be assigned to organizations like the MCIA and the MAFCs. Intelligence personnel coming out of joint or other external analyst assignments are ideal candidates for these same Marine Corps organizations, and should be assigned to those billets with the same regional focus. At a minimum, the Marine Corps should consider trying to assign intelligence personnel to various commands and billets that cover the same

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<sup>114</sup>Decker, 23. Both then Captain Decker and the author served with the senior analyst FAO during Desert Storm, and his FAO expertise and insight were indeed invaluable to the I NEF G-2 analytical effort.

general part of the world. Survey respondents supported this proposition with nearly eight out of ten agreeing or strongly agreeing with the statement, 'A career pattern that dictated assignments to units at all echelors but that predominantly kept the intelligence officer looking at the same general region of the world would enhance regional expertise and significantly improve all-source fusion analysis capabilities.'

The last major assignment related factor which affects all-source fusion is billet assignment versus experience level. A good example can once again be drawn from the MAFC experience, although similar situations exist in other intelligence sections/organizations. When an officer reports to an intelligence organization, he is placed in a billet commensurate first and foremost with his rank, and then if there is any flexibility, by his experience. Officers assigned to organizations like the MAFCs with little or no regard to their overall intelligence experience or their analytical experience, can have a disruptive effect on the organization. There has been a tendency to assign very junior officers, many of whom are reporting to their first FMF assignment or who have just lateral moved into the intelligence field, to the various MAFCs. This would present difficulties for mature intelligence organizations staffed with numerous other experienced intelligence officers, let

alone to relatively new organizations trying to establish an all-source fusion analysis capability like the three Marine Corps MAFCs.

Given that the manning priorities for experienced intelligence officers favor joint/external billets followed by the priority commands (including the MEUs), it is not surprising there is an experience deficit in the FMF in general, and in the MAFCs specifically. Furthermore, given the FMF manning levels of around 50 percent, those few experienced intelligence officers assigned there gravitate toward key billets other than analyst billets.

### **3. Personnel Continuity/Assignment Length**

Besides the screening and selection criteria for external intelligence billets, another unique situation with external billets is that they are, with very few exceptions, three year tours--a decided benefit for anyone filling an analyst billet. In the FMF, if Marines stay at one location for a full three year assignment, they seldom stay in the same billet assignment for all three years. This "movement" hurts all-source fusion analysts. Analysts need time to develop specific functional area familiarity (air order of battle, ground order of battle, missile order of battle, etc.) as well as regional familiarity in the focus of their particular billet.

Survey respondents indicated by a wide margin, just how important personnel continuity is to analysis efforts. When asked, "How important is personnel continuity to an intelligence organization's ability to conduct anything other than superficial analysis?", 51 percent said extremely important, 33 percent said very important, and 11 percent said important. Only 2.7 percent said not very important. The respondents also indicated how long they thought minimum tour lengths should be for full time analysts. 83 percent said three years or longer, providing a strong consensus for three year analyst tours in the FMF. However, the reality is that most intelligence personnel serving in FMF analyst billets serve less than two years in one billet. Nearly 80 percent of the respondents said that in their experience, not counting joint/external billets, the average analyst stays in the same billet two or less years. Nearly 33 percent of the respondents said one year or less. This kind of turnover is extremely counterproductive to any all-source fusion analysis effort.

Unfortunately, this kind of turnover is not just at the "trench level" in all-source fusion organizations. The 2d MAFC had five different OICs in the three years from 1989-1992, and the 1st MAFC had four different OICs from 1991-1992.

Of final note, higher echelon DoD intelligence organizations, including all unified command J-2 sections,

have long realized the importance of personnel continuity in various critical billets. Many of the billets considered critical are the analyst billets in these various organizations. The Marine Corps has likewise come to that conclusion, at least in respect to the Marine Corps Intelligence Activity. The Marine Corps Intelligence Roadmap acknowledges:

Civilians within the General Defense Intelligence Program (GDIP) are employed in critical intelligence positions on Headquarters Marine Corps, MARFOR Headquarters, and other major staffs. These civilians provide valuable stability and continuity. Of special note, the majority of the Marine Corps' GDIP-funded civilians are employed as the backbone of our expanding capability at the MCIA (NMIC) and its Quantico detachment.<sup>115</sup>

With personnel continuity so important at these echelons, how can it not be just as important or more important at the organizations created to conduct operational and tactical level all-source fusion analysis?

#### **C. IMPACT OF CURRENT MANNING INITIATIVES**

A number of initiatives are underway in the Marine Corps to correct the overall intelligence officer manning deficiencies. Among these are the Additional Primary Military Occupational Specialty (APMOS) Program and Basic School Accessions. Additionally, the Marine Corps continues to

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<sup>115</sup>"Intelligence Roadmap," 10.

lateral move officers, primarily from the overmanned combat arms MOS's to undermanned fields such as intelligence. Each of these methods, while welcome as means to increase the raw numbers of intelligence officers, present problems if the officers are not carefully screened before they come into the intelligence field (as noted above), and if they are inappropriately assigned.

In all three programs mentioned above, these new officers are almost without exception assigned to FMF billets. Unfortunately, too many of these officers are showing up in the MAFCs. There appears to be a perception that more intelligence officers in an organization like the MAFC is better. That is only true if the officers are experienced. The MAFCs, already undermanned, suffer an additional burden is when brand new 0202's or 0231's show up in any great number. In the case of the 2d MAFC, at times, over one third of the personnel assigned were in their first intelligence billet. A combination of inexperienced enlisted personnel and inexperienced officers strains the organization's ability to accomplish its mission. If the MAFCs were manned at 80 percent of T/O or higher, some few new personnel to the MOS could be assimilated. A disproportionate amount of time and organizational energy is spent on the first intelligence assignment minorities. However, the MAFCs could be a good experience for limited numbers of first intelligence

assignment Marines if the entire organization is adequately manned overall, and manned with some of our more experienced analysts.

Assigning Second Lieutenants to MAFCs, unless they are prior enlisted intelligence specialists, makes the "numbers" look good, but does nothing to enhance the all-source fusion capability of the organizations.

In some ways, assigning lateral move officers to the MAFCs presents even more of a problem. The officer, by virtue of rank (usually senior First Lieutenants or Captains), often fills a supervisory analytical billet. This is also a strain on the organization, both for the officer involved and for the junior officer and enlisted analysts who work under that officer.

Although uncertain if any APMOS officers have yet been assigned to analyst billets in the MAFCs, this would be even more problematic. There are many unique MAGTF intelligence requirements, both descriptive and predictive in nature, to which an officer who has only attended the Army intelligence course at Fort Huachuca will not have been exposed--not the least of which include fixed wing air intelligence and amphibious intelligence. The other problem associated with APMOS intelligence officers is that they will face an uphill battle learning their jobs OJT. When the survey respondents were asked, "In general, with no previous regional expertise



or analytical background, how long do you think it takes to educate, train, and through experience, develop a good, qualified all-source analyst (not counting civilian education)?", only 11 percent said less than one year; 37 percent said 1-2 years; 24 percent said 2-3 years; 17 percent said 3-5 years; and 9 percent said five or more years. Again, depending on the selectivity and screening criteria for those selected for the APMOS program, one three year tour in an intelligence analysis billet, is unlikely to benefit the Marine Corps' all-source fusion analytical capability. At least Second Lieutenant accessions and lateral moves present the opportunity to generate a longer term benefit.

#### **D. MORE DEMAND THAN SUPPLY**

There is much more demand for experienced intelligence analysts than there is supply. Despite the manning initiatives to put more officers into the intelligence field, at least in the short term, the critical short supply of experienced intelligence officers with specific all-source fusion analysis skills will not be alleviated soon. Given the shortages will continue, the Marine Corps must take a hard look at where these experienced officers need to be assigned to take maximum advantage of their experience.

The Marine Corps Intelligence Activity will continue to expand its all-source fusion capabilities, by continuing as a

priority command for Marine assignment fills, together with additional projected GDIP funded analyst billets in the coming years. MEUs will continue to receive some of the very best and most experienced officer and enlisted intelligence personnel because they are at the "pointy tip of the spear." However, if operational and tactical all-source fusion analysis is to be enhanced, more experienced personnel need to first be assigned to the MEF level MAFCs, and if at possible, to the Divisions and Wings. If the concept of centralized all-source fusion support at the MEF level is validated in the current intelligence review, then the MAFCs must start to receive not only more personnel, but the right personnel--those with specific all-source fusion analysis experience. Today, as many of the survey respondents pointed out, the best place to get true all-source fusion experience is in joint analyst billets. The first action the Marine Corps should take, is to make a concerted effort to take advantage of personnel coming out of these joint analyst billets by placing them in the MAFCs. This is probably the fastest way to get the MAFCs back on track to becoming viable all-source fusion organizations. Even with manning shortages, the right people with the right experience levels filling 50 percent of the MAFC billets would go a long way to enhancing operational and tactical all-source fusion capabilities. This would pay dividends not only for support to Marines, but when the MAFCs

are involved in providing joint all-source fusion analysis support. Then, a high percentage of analysts with previous joint experience would prove particularly invaluable.

The Marine Corps is reviewing all external intelligence billets and revalidating the requirements. As mentioned earlier, the prognosis is for even greater demands for more external billets, including analysts, as the various JICs take form and attempt to expand their capabilities to provide "one stop shop" all-source fused intelligence support to operational commanders. The Marine Corps must make some extremely hard decisions regarding where the focus of effort needs to be when it comes to assigning the limited number of experienced analysts that we have. Once again, the survey respondents' opinions were solicited. When asked, "Scenario independent, with a limited number of experienced analysts at any time in Marine Corps Intelligence and all other things being equal, where do we get more bang for the buck (advantage to Marines at the pointy tip of the spear) in their assignment?", and allowed to select more than one response, Theater level was the number one response marked by 50 percent of the respondents. Next was MEF level (including MAFC) with 48 percent, followed by MEU level with 35 percent. Next was Division/Wing level with 22 percent, followed by National level with 14 percent. Somewhat surprisingly, Service level was only marked by 9 percent, behind even Battalion/Squadron

level with 11 percent. Given these opinions, other than the Joint level which are already "excepted" commands, the next manning priority for experienced analysts should be the MEF/MAFC, which unfortunately is a "proportionate share" command, followed by the MEUs and eventually the MCIA, both "priority" commands.

To enhance all-source fusion analysis capabilities, the Marine Corps must become more discriminatory in its initial assignment criteria for 0202's and 0231's. Also, a much better effort needs to be made to take advantage of those with particular analytical or regional experience, by assigning them to key analysis billets. The first priority for such personnel should be the MAFCs. Personnel turbulence in all-source fusion organizations must be minimized with such billets designated as hard three year tours or even four year tours. If these type steps cannot be taken, no greater amount of personnel through manning initiatives alone will make a significant difference. A MAFC manned at 100 percent with largely inexperienced personnel is more detrimental to the all-source fusion effort than a MAFC manned at 33 percent, but with all those personnel being experienced analysts. The Marine Corps must come to the realization that not everyone can be an analyst. Until that happens, and those with actual aptitude and experience are identified and earmarked, one, for successive analyst assignments, and two, for successive

assignments covering the same general areas of the world, all-source fusion analysis will continue to suffer.

## VI. CONCLUSIONS

In Vietnam, Beirut, Desert Storm, and many other operational commitments, Marine Corps intelligence learned the value of all-source fusion analysis. Despite those lessons, all-source, fused, tailored intelligence, particularly at the operational/tactical level, remains a Marine Corps objective, but not a reality. All-source fusion and tailoring of intelligence are much more complex concepts and processes than most people understand. The efficient and accurate processing of raw information is too often more than enough challenge for the Marines engaged in all-source fusion analysis and production; let alone filtering, fusing, and tailoring timely, pertinent, usable, information into intelligence needed by commanders, other Marines, and increasingly, joint operating forces.

Three primary areas significantly impede Marine Corps capabilities to produce all-source, fused, tailored intelligence: structure, organization, and manning combined; training and education; and experience level and assignments.

The Marine Corps decision in the late 1980s, to create organizations and structure to focus all-source fusion intelligence analysis at two levels has paid partial dividends. Commandant Alfred M. Gray's vision for a service

level all-source fusion center has largely been realized with the establishment and continued growth of the Marine Corps Intelligence Activity. This organization, thanks to resource investment and civilian analyst billets--a reflection of the Marine Corps' priorities--has developed a capability to accomplish its mission and tasks.

Unfortunately, the MCIA is not in a position, physically or within an operational chain of command, to provide direct all-source fused, tailored intelligence to deployed Marine forces. While the MCIA continues to expand both in terms of personnel and capability, it remains focused primarily on service level intelligence support. With evolving DoD joint intelligence architecture placing the responsibility for operational intelligence support, including all-source fused intelligence analysis and production, at the respective unified command Joint Intelligence Centers, service level intelligence organizations are no longer focusing on operational intelligence support to deployed forces.

This leaves the MAFCs, specifically created to serve this operational intelligence function, as the organizations of choice to accomplish all-source fusion intelligence analysis support for Marine operating forces. Unfortunately, the Marine Corps has not made the proper investment in these organizations in terms of manning--both in numbers and in quality and experience level of the personnel assigned. This

has been, and continues to be, the most significant reason why all-source fused, tailored, intelligence has not been produced by Marines for Marines in the quantity and quality desired or expected. The prognosis for increased manning in the FMF is not good, given overall Marine Corps downsizing and the increasing demands for additional intelligence personnel to man various expanding joint intelligence organizations. The Marine Corps must decide where the best return on its investment will be, relative to manning higher priority external/joint billets or the lower priority FMF billets.

The structure/billets taken from the major subordinate commands to create the MAFCs has seriously diminished what all-source fusion capabilities previously existed at those organizations, while not providing significant increases in all-source fusion support back to those commands from the MEF/MAFC. Without increased intelligence structure and manning of that structure across the board, Marine Corps all-source fusion analysis efforts will continue to remain just a goal.

The Battle Roster program of providing large numbers of augmenters to the MEF G-2/MAFC is not conducive to all-source fusion analysis efforts. The existing difficulty of providing all-source fusion analysis, plagued by chronic personnel shortages, is often exacerbated by the influx of other relatively unknown personnel at the last minute in a



developing or actual crisis. The all-source fusion analysis team must be largely formed and trained together over time, to even begin to maximize the cumulative potential of the various analysts.

With or without additional manning and structure, the Marine Corps must do a better job of training and educating intelligence personnel in the art of intelligence analysis and all-source fusion. All-source fusion intelligence analysis must become the focus of all intelligence training. This includes formal training at NMITC and better integration of all-source information and intelligence in on-the-job training. Increased data and information connectivity and access, facilitated by the fielding of the Joint Deployable Intelligence Information System (JDIIS) and the Marine Corps' Intelligence Analysis System, should support endeavors in this regard. However, all-source fusion training must be continuous and realistic, both in garrison and in exercises.

Marine intelligence personnel must train the way they are expected to "fight." If real intelligence analysis and all-source fusion is not demanded in CPXs and FTXs, then there is no reason to expect intelligence analysts to be able to "analyze" huge volumes of information, separating wheat from chaff, in actual crisis situations. Despite the short term initiatives to alleviate intelligence officer personnel shortages, continued shortages of experienced intelligence

personnel assigned to the FMF will continue to dictate an almost exclusive focus on processing combat information versus production of finished intelligence reflecting well reasoned, all-source, fused analysis. This, coupled with continued unrefined training, will virtually ensure that "analysts" are ~~not~~ adequately prepared to accomplish true all-source fusion intelligence analysis.

Area familiarity/expertise is absolutely necessary for all-source fusion analysis efforts. The accurate and precise interpretation of much of the information originating from a crisis area/region is often only possible through the perceptive understanding of an area "expert." The Marine Corps needs to make a concerted effort to train and educate more personnel with area expertise, and then strive to do a better job of tracking and assigning these personnel to locations and organizations where optimal use of their expertise can be made.

Regarding assignments, there are not enough experienced intelligence personnel working in analysis billets. An effort must be made to identify key analyst billets within the Marine Corps, starting with the MAFCs. Then, better efforts must be made to fill these billets with personnel specifically experienced in all-source fusion analysis, as well as with FAOs and/or other intelligence personnel with pertinent area expertise/familiarity. Only then will these organizations

begin to approach their potential, and at the same time, begin to serve as training grounds for other less experienced analysts. Until this happens, the Marine Corps' reliance on external/joint billet assignments to achieve this kind of experience will not be alleviated.

Finally, personnel assigned as analysts must also be allowed to serve in those billets for longer periods of time. Constant personnel turbulence is counterproductive to developing and maintaining an all-source fusion analysis capability. Minimum tours should be three years, with every effort made to minimize specific billet turbulence within organizations. This will allow analysts to "mature" in their specific area responsibilities, and facilitate the all-source fusion process.

Unfortunately, the problems identified in this thesis are for the most part symptomatic of the many larger problems facing Marine Corps intelligence in general. The Marine Corps is painfully aware of the many deficiencies within the intelligence field and is aggressively tackling the problems head on. Many of these institutional intelligence deficiencies have existed for years, and are now magnified within the realities of Marine Corps downsizing. At the same time, missions are expanding, commitments continue unabated, and joint requirements are increasing the demands on our limited intelligence capabilities.

The Marine Corps has always prided itself on doing more with less. This does not work when it comes to all-source fusion analysis support to Marine and joint operating forces. The Marine Corps must make a much greater investment in people--in terms of numbers, training, and assignments--if all-source fused, tailored, intelligence support by Marines for Marines and joint operating forces is to be improved. Without that investment, Marine Corps intelligence organizations and personnel will continue to operate as they have, and all-source, fused, tailored intelligence will remain more a goal than a reality.

## **APPENDIX**

1. **Survey Questionnaire.** The author designed this questionnaire in an attempt to measure the opinions of his fellow Marine Corps intelligence officers regarding the topic of this thesis: All-Source Fusion and Analysis.

2. **Questionnaire Administration.** The author attempted to send the survey questionnaire to the 340 Marine Corps intelligence officers (0202 and 0205) between the rank of Lieutenant Colonel and Warrant Officer on active duty in April 1993. 147 officers responded before the deadline of 21 May 1993, out of 310 officers believed to have received the survey (30 were not deliverable at the addresses provided). This was a 47 percent response rate. The high response rate, and overall tone and emotion in the respondents' many extensive comments, reflects the high levels of concern on this specific issue, and on the many broader issues which affect Marine Corps Intelligence.

3. **Questionnaire Results.** The survey questions as administered, follow, with the percentages of respondents' marking the block(s) so indicated. If the question allowed more than one block to be checked, then the percentages total

in that question will exceed 100 percent. In the other questions requiring only one block to be checked, the percentages will total nearly 100 percent, with any shortage reflecting the percentage who chose not to respond at all to that question (the author chose not to invalidate questionnaires in which every question was not answered). There were extensive comments and the author tried to capture the essence of some of them in the body of the thesis. The percentages which appear are from the entire 147 who responded. Although not reflected herein, the author recorded the responses by field grade (Majors and Lieutenant Colonels) and company grade (Warrant Officer to Captain), as well as by type of current duty (Joint/External billet; Marine Corps Non-FMF billet; and Marine Corps FMF billet). There were no apparent trends reflecting any major differences of opinion based on either rank or current duty in any of the questions.

## QUESTIONNAIRE SURVEY

Please read through entire questionnaire once before answering questions.  
Please feel free to make comments in the margins if space has not been allowed.

1. Your Name/Rank: \_\_\_\_\_
2. Your Primary/Additional MOS's: \_\_\_\_\_
3. Prior enlisted experience (years and MOS): \_\_\_\_\_
4. Name and address of Present Command: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
5. Next command and billet (if under orders): \_\_\_\_\_
6. Your current billet title: \_\_\_\_\_
7. Brief description of your duties: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
8. Your military educational background: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
9. Undergraduate School: \_\_\_\_\_ Major: \_\_\_\_\_  
Graduate School: \_\_\_\_\_ Major: \_\_\_\_\_
10. Years in intelligence field: \_\_\_\_\_
11. Lateral Move? No \_\_\_ Yes \_\_\_ Year? \_\_\_\_\_ Rank at time? \_\_\_\_\_
12. Previous intelligence assignments: \_\_\_\_\_  
(organizations/dates/billets) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
13. Previous Intelligence Formal Training/Education (include course name,  
location, and dates): \_\_\_\_\_  
\_\_\_\_\_  
Foreign Area Officer (FAO) ? \_\_\_\_\_

14. Overall, how adequately do you feel we accomplish all-source fused intelligence analysis in the Marine Corps?

- ( 0%) extremely adequately
- ( 3%) very adequately
- (25%) adequately
- (40%) somewhat adequately
- (27%) not very adequately

15. Overall, what do you think most inhibits our ability to best do "all-source fused" intelligence analysis? (Please rank order choices provided 1-6 or N/A if you believe nonapplicable)

- ( 2 ) Structural Impediments (inadequate T/O's; wrong intel structure in Marine Corps; too much reliance on other echelons both internal and external to Marine Corps)
- ( 1 ) Manning Levels (faces for places)
- ( 4 ) Training and Education (includes formal schools and regular MOS)
- ( 3 ) Experience Level/Assignment Policy (right faces in right places)
- ( 6 ) Operational and "Other" Focus/Commitments (dilation of effort)
- ( 5 ) Connectivity/Access to All-Source Data/Information/Intelligence
- ( ) Other. Please Specify: \_\_\_\_\_

Tell where between 1-6 above you would place this choice (or choices).

16. With the current intelligence structure and manning, true, all-source fused intelligence analysis is accomplished at what level(s)?

- (37%) Service level (Marine Corps Intelligence Activity)
- (23%) Force level (FMFLANT/FMFPAC)
- (65%) MEF level (MAFC's/G-2 Analysis and Production Section)
- (16%) Div/Wing/FSSG level (check and circle each as appropriate)
- (42%) MEU level
- ( 6%) Regt/Group level
- ( 5%) Bn/Sqdn level



17. Realistically, at what level(s) should we strive to develop a true, all-source fused intelligence analysis capability?

- (27%) Service level
- (23%) Force level
- (77%) MEF level
- (43%) Div/Wing/FSSG level (check and circle each as appropriate)
- (59%) MEU level
- (12%) Regt/ Group level
- ( 8%) Bn/Sqdn level

18. Have any of the recent past/current intelligence reorganization initiatives increased the level of all-source fused intelligence support your unit/echelon (current or past) has received?

- (10%) NMJIC (National Military Joint Intelligence Center)
- (35%) Theater JIC's (AIC, JICPAC, JAC, etc.; if so specify below)
- (14%) Marine Corps Intelligence Activity (old Marine Corps Intel Center)
- ( 9%) Other Service Intelligence Organizations (if so specify below)
- (18%) MAGTF All-Source Fusion Centers
- (11%) Not Applicable
- (33%) Not Apparent

Specific organization and type(s) product(s): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

19. The creation of the MAGTF All-Source Fusion Centers at each SRIG was overall a positive step toward enhancing Marine Corps capabilities to produce all-source fused, tailored intelligence.

- (22%) Strongly agree
- (44%) Agree
- (14%) Disagree
- (12%) Strongly disagree
- ( 8%) No opinion

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

20. The recent emphasis on Joint Intelligence Centers at the Theater and Joint Task Force levels as the focal point for all-source fusion/"one stop shop" intelligence support for operating forces will improve all-source fused, tailored intelligence analysis support to Marine forces.

- (19%) Strongly agree
- (42%) Agree
- (19%) Disagree
- (10%) Strongly disagree
- ( 9%) No opinion

Comments: \_\_\_\_\_  
\_\_\_\_\_

21. If every billet was filled by a qualified individual, there is adequate structure (billets) at your organization/echelon to effectively accomplish all-source, fused intelligence analysis.

- (12%) Strongly agree
- (28%) Agree
- (19%) Disagree
- (21%) Strongly disagree
- ( 3%) No opinion
- (16%) Not applicable

22. Personnel augmentation (regular or reserves) to fill empty line numbers immediately prior to major exercises or actual developing crisis situations enhances ability to conduct all-source fused intelligence analysis.

Advance augmentation to really be useful should be:

- |                         |                           |
|-------------------------|---------------------------|
| (14%) Strongly agree    | (44%) more than one month |
| (46%) Agree             | (30%) one month           |
| (17%) Disagree          | ( 3%) three weeks         |
| (17%) Strongly disagree | (11%) two weeks           |
| ( 5%) No opinion        | ( 2%) one week            |
|                         | ( 0%) less than one week  |

23. All-source fused intelligence support to Marine forces would be improved if manning priorities changed to emphasize manning of FMF intelligence billets at the expense of external billets/supporting establishment billets.

- (21%) Strongly agree
- (22%) Agree
- (36%) Disagree
- ( 9%) Strongly disagree
- ( 7%) No opinion
- ( 1%) Not applicable

24. The Marine Corps' new battle roster concept of taking personnel from primarily non-FMF units to flush out T/O line numbers for deploying MEF and Component Command Headquarters (including at times JTF line numbers) is a good solution to the undermanning problem of G-2 sections.

- ( 3%) Strongly agree
- (36%) Agree
- (31%) Disagree
- (20%) Strongly disagree
- ( 8%) No Opinion

Comments: \_\_\_\_\_  
\_\_\_\_\_

25. Have you ever been assigned to a permanent or temporary intelligence billet because of any unique characteristic/experience related to specific analytical experience expertise, training, or education (including foreign language capability)? Yes 31% No 64%

If yes, where and why? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Comments: \_\_\_\_\_  
\_\_\_\_\_

26. Within the Marine Corps Intelligence field, our more experienced personnel generally work in analysis billets.

OFFICER	ENLISTED
( 1%) Strongly agree	( 3%) Strongly agree
(12%) Agree	(27%) Agree
(57%) Disagree	(39%) Disagree
(19%) Strongly disagree	(15%) Strongly disagree
(10%) No opinion	(14%) No Opinion

If not, where do they tend to be assigned? \_\_\_\_\_

27. More officers trained in the FAO program assigned to specifically coded intelligence analysis billets would enhance our abilities relative to all-source intelligence analysis.

Intel Officers Trained & Assigned	Non-Intel Officers Trained & Assigned
-----------------------------------	---------------------------------------

(42%) Strongly agree	(17%) Strongly agree
(40%) Agree	(48%) Agree
( 7%) Disagree	(14%) Disagree
( 1%) Strongly disagree	( 8%) Strongly disagree
( 9%) No opinion	(12%) No opinion

28. A career pattern that dictated assignments to units at all echelons but that predominantly kept the intelligence officer looking at the same general region of the world would enhance regional expertise and significantly improve all-source fusion analysis capabilities.

(40%) Strongly agree  
(37%) Agree  
(11%) Disagree  
( 5%) Strongly disagree  
( 4%) No opinion

29. Scenario independent, with a limited number of experienced analysts at any time in Marine Corps Intelligence and all other things being equal, where do we get more bang for the buck (advantage to Marines at the pointy tip of the sword) in their assignment?

- (14%) National level intelligence organizations
- ( 9%) Service level intelligence organizations
- (50%) Theater level intelligence organizations (JICs, including JTF's)
- ( 5%) Separate Component Command level intelligence organizations
- (48%) MEF level intelligence organizations (including MAFC)
- (22%) Div/Wing/FSSG level intelligence organizations
- (35%) MEU level
- (11%) Bn/Sqdn level

Comments: \_\_\_\_\_

\_\_\_\_\_

30. In general, with no previous regional expertise or analytical background, how long do you think it takes to educate, train, and through experience, develop a good, qualified all-source analyst (do not count civilian education)?

- (11%) less than one year
- (37%) 1-2 years
- (24%) 2-3 years
- (17%) 3-5 years
- ( 9%) five or more years

31. Other than any specific analysis courses already listed, what general or specific analytical training or education have you received (that directly contributes to your abilities as an analyst)?

\_\_\_\_\_  
\_\_\_\_\_  
Any you would specifically recommend? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

32. As an occupational field, how well do we provide on the job training for 0202's and 0231's relative to all-source fusion and analysis?

- ( 0%) Extremely well
- ( 2%) Very well
- (16%) Adequately
- (49%) Not very well
- (32%) Poorly
- ( 2%) No opinion

33. During CPX's and field exercises, how often is realistic all-source fusion analytical intelligence training integrated into the exercise?

- ( 1%) Very often
- ( 6%) Often
- (20%) Sometimes
- (60%) Seldom
- (11%) Never

Comment: \_\_\_\_\_

34. In your overall experience, how significantly does over commitment/tasking of you and/or your fellow intelligence professionals impact on the amount and quality of effort that goes into intelligence analysis?

- (35%) Very significantly
- (44%) Significantly
- (12%) Not very significantly
- ( 3%) Not at all

Comment: \_\_\_\_\_

35. How often are "other priorities" dictated that seriously impede the day-to-day analytical effort?

Garrison	Field/Exercise	Crisis Commitment
(40%) Very often	( 6%) Very often	( 8%) Very often
(40%) Often	(31%) Often	(10%) Often
(10%) Sometimes	(39%) Sometimes	(28%) Sometimes
( 4%) Seldom	(17%) Seldom	(40%) Seldom
( 1%) Never	( 1%) Never	( 5%) Never

36. What are the primary reasons which inhibit maximizing the analytical effort in the following circumstances?

Garrison: \_\_\_\_\_

Field/Exercise: \_\_\_\_\_

Crisis Commitment: \_\_\_\_\_

37. How important is personnel continuity to an intelligence organization's ability to conduct anything other than superficial analysis?

Overall tour length

Impact of FAP/TAD/Gu...

(51%) Extremely important

(34%) Extremely important

(33%) Very important

(28%) Very important

(11%) Important

(22%) Important

(3%) Not particularly important

(10%) Not particularly important

(0%) Not important

(1%) Not important

38. Minimum tour lengths for full time analysts should be:

(18%) 4 or more years

(14%) 2 years

(38%) 3-4 years

(0%) 1-2 years

(27%) 3 years

(1%) No minimum

39. In your experience, not counting joint/external billets, how long does the average analyst stay in one billet? \_\_\_\_\_

40. In your current billet, ready, day-to-day access to wide sources of unclassified, open source data/information is: (including unit intel libraries, FBIS, CNN, newspaper and periodical subscriptions, think tank publications, on-line news service, etc.)

(33%) Extremely good

(11%) Fair

(20%) Very good

(8%) Poor

(10%) Good

(3%) Unsatisfactory

(8%) Adequate

(5%) Not applicable

Comments: \_\_\_\_\_

41. In your current billet, convenient, day-to-day access to relevant GENSER data, information, and intelligence products is: (including hard/soft copy products, classified library, intelligence related message traffic, local and online intelligence databases, etc.)

(33%) Extremely good

(11%) Fair

(20%) Very good

(8%) Poor

(10%) Good

(3%) Unsatisfactory

(8%) Adequate

(5%) Not applicable

Comments (unclassified only): \_\_\_\_\_

42. In your current billet, convenient, day-to-day access to relevant SCI materials is:

(31%) Extremely good	(4%) Fair
(13%) Very good	(5%) Poor
(12%) Good	(4%) Unsatisfactory
(15%) Adequate	(14%) Not applicable

Comments (unclassified only): \_\_\_\_\_

43. Information overload is a problem in the following environments:

Garrison	Field/Exercise	Crisis Commitment
(22%) Very often	(6%) Very often	(36%) Very often
(11%) Often	(17%) Often	(33%) Often
(25%) Sometimes	(38%) Sometimes	(13%) Sometimes
(43%) Seldom	(26%) Seldom	(8%) Seldom
(22%) Never	(9%) Never	(5%) Never

44. Once fielded, the intelligence analysis system (IAS) will significantly improve our overall analysis capabilities.

#### Familiarity with IAS

(14%) Strongly agree	( ) Very familiar
(23%) Agree	( ) Familiar
(26%) Generally agree	( ) Slightly familiar
(9%) Disagree	( ) Unfamiliar
(3%) Strongly disagree	
(23%) No opinion	

Comments: \_\_\_\_\_

45. Current Marine Corps intelligence automation/systems emphasis and initiatives have freed analysts to spend more time doing the human "thinking" and "analysis" and "reasoning" functions.

(3%) Strongly agree
(1%) Agree
(21%) Generally agree
(24%) Disagree
(49%) Strongly disagree

Comments: \_\_\_\_\_



46. How important is analyst familiarity with single source reporting (DIRNSA, NPIC, AMEMBASSY, USDAO, etc.) in day-to-day garrison work to develop the skills necessary to effectively integrate such reporting through all-source fusion when a crisis develops?

- (38%) Extremely important
- (34%) Very important
- (20%) Important
- ( 3%) Not very important
- ( 0%) Not important at all
- ( 3%) No opinion

47. Do you encounter difficulties getting on distribution for the type reporting you feel you need and can handle at your echelon? Yes 43% No 50%

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

48. The following inhibits effectively integrating SCI material into overall Marine Corps "all-source" analytical capabilities:

Fear of "Green Door" Syndrome

Physical difficulty in dealing with SCI

- (21%) Strongly agree
- (22%) Agree
- (15%) Generally agree
- (32%) Disagree
- ( 2%) Strongly disagree
- ( 3%) No opinion

- (27%) Strongly agree
- (28%) Agree
- (26%) Generally agree
- (11%) Disagree
- ( 1%) Strongly disagree
- ( 2%) No opinion

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

ANY OTHER ADDITIONAL COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Would you be willing to be contacted telephonically for follow up questions? \_\_\_\_\_  
(All comments will remain non-attributable in my report!) Thank You.

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